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MAX R. BRUNSTETTER, *Editor*

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TEACHERS COLLEGE RECORD

Eisenhower's Mission in America*

BOYDEN SPARKES

GENERAL Dwight D. Eisenhower, it is commonly conceded, refused the chance to become the President of the United States. Instead, he accepted the Presidency of Columbia University. Why?

Of course, he stated carefully reasoned motives for his refusal to be put in the White House. But many still wonder why this distinguished commander of armies should take upon himself a tough job as administrator of one of the nation's oldest, largest, and wealthiest seats of learning. Ordinarily, only an outstanding educator is considered for such a post. The General on every possible occasion says with complete candor and humility that he is *not* an educator. Why, then, is he there?

The answer is clear: Duty. Duty self-imposed and in the interest of national security. General Ike came back from the war with a mission. He regards this mission in America as scarcely less urgent than the one on which he went abroad in 1942. Pearl Harbor would pale to insignificance, he says, compared with the surprise we shall get unless we keep ourselves so strong and so strongly united that no nation would risk our wrath. Columbia University, located in the heart of New York City, he feels, is the place where he can work effectively now for national security.

There is the answer. I have been digging it out since last September.

I started with Eisenhower himself; walked with him on the campus and listened; listened in his home and in his office. Since then I have reviewed most of what he has said or written since the war ended; talked with deans, professors, and students. All understand why General Ike has joined his

*By special permission of *The American Magazine*, we print here this abridgment of Mr. Sparkes' article which appeared in the December, 1948 issue of *The American Magazine*.

life with theirs: because he is convinced Columbia University offers him the best opportunity to gain crucial objectives in a struggle to preserve peace and to preserve the American way of individual freedom and free enterprise. He believes free enterprise is the great source of our strength. The preservation of this strength is the core of his purpose in serving as the President of Columbia.

The General talks plainly. As a soldier he sees that our unrivaled power to manufacture all manner of things, including frightful weapons, is, in fact, what we must defend at all costs. But he knows and says this power is rooted in our freedoms. So, if we guard and cherish our basic concepts of freedom, we stay strong.

What this requires, he is convinced, is to replenish our supply of leaders for civil life as certainly as we train men for military leadership. Only when there are enough confidence-inspiring leaders in close touch with all elements of the people can we hope to stem the inroads of foreign ideologies. Columbia University is where the General hopes to produce the kind of leaders we now need desperately: young men prepared in mind and conscience by their education to serve American freedom with evangelistic zeal, by speaking or writing the truth about it any time they hear it maligned.

The 2,500 undergraduates of Columbia College are probably the most carefully chosen of any similar group in the country, not excepting West Point and Annapolis. Even more important to Ike's fundamental purpose, though, is one particular graduate school—Teachers College. Every schoolhouse in the country is to some degree under the influence of this institution. Here is where they train teachers to teach the teachers. Thousands of its graduates are at work all over the nation as educators; a great many of them hold key positions. About 20 per cent of the faculties of at least 6 state teachers' colleges are graduates of this institution on the Columbia Campus.

So are the presidents of 33 teachers' colleges as well as the commissioners of education in 7 states. Superintendents of the school systems in about 75 cities came back to Teachers College last summer for a work conference. Every one of them was a graduate, and one of the men who joined them with his coat off was Ike.

Teachers College is a part of Columbia University but a separate corporation, and General Eisenhower is its President. Through Teachers College an educational idea can be funneled into all the schools of the country faster and more thoroughly than from any other spot. So right there Ike has means for advancing toward one of his main objectives—wider comprehension by everybody in America that we are strong because we are free; strong because of our unmatched power to manufacture. As Ike says: "Our victory over the totalitarian nations is a ringing vindication of the American way of life; when the chips were down, democracy and free enterprise could not be matched by regimentation."

Widespread comprehension of this truth, Ike says, is the only way to over-

come the most glaring weakness on the home front. This weakness is the fact that masses of his fellow countrymen, through their ignorance, have become disbelievers in the American way and sympathizers with the Communists.

On this account General Ike argues that we've got to do vastly more to help teachers in the schools. When he talked in his shirt sleeves to that gathering of school superintendents last summer he told them the schools have become the first line of defense. He says if it's a question of having a hospital or a school, we've all got to realize the school comes first. The biggest bargain we can buy, he says, is peace. While he was Chief of Staff the two big objectives of his campaign were universal military training and a single defense establishment including army, air force, and navy. So now this third objective of Eisenhower can be defined: He says we must double the teacher force, double the pay, and strive to increase schoolroom effectiveness fivefold.

General Ike makes no pretense of being a teacher or educator in the accepted sense. When he first took the job last spring he said to Dean Harry J. Carman of Columbia College, "I don't know anything about this place. I'm a freshman."

He doesn't try to preach or exhort. Rather, he educates by leadership and example. Of course, he is magnificently equipped for such a role, and for the far-reaching job he has undertaken. All the qualities he finds essential to the development of leadership in a land of free enterprise are embodied in his own character.

I heard him give a surprising expression to one of these qualities during his first meeting with the undergraduates of Columbia College, heart of the huge and sprawling university. As he faced rows upon rows of eager students, it was as if he were looking into his country's future. He knew there was stern work ahead for these young men, but what he told them was: "Have fun!"

The General was saying: "You are a select body of men; there could be no finer brought together, but in this business of having fun you have not been given the facilities here that you deserve. . . . I can tell you one thing, gentlemen, I'm going to help you get them."

The General knows, better than most, that fun is a restorer of self-confidence, and he knows that out of self-confidence come all creative effort, all leadership and victory. Hence his earnestness as he said, "I mean it! The day that goes by without your having had some fun—the day you don't enjoy life—is not only unnecessary but un-Christian!"

In his view, fear and discouragement are the most paralyzing forces that can afflict any human being. They are the destroyers of free spirit and enemies of achievement.

On a December day when the Germans had broken our lines, and armored Panzer divisions were pouring through the hole, this same man, not yet knowing whether the Germans could be stopped, said to his staff, "I'll

see only smiling faces around here this morning—or else." Appreciation of fun and smiling faces is a part of the General's concept of leadership, because fun is the fuel of optimism. In his formula for leadership, optimism, plus integrity, plus faith in our country's brand of freedom, add up to the kind of leadership he is trying to generate at Columbia.

• • • •

All who have worked close to him in the Army and those who work with him now agree the General seems to escape a great deal of strain by doing easily and surely whatever he tackles. Those who are in and out of his office have observed that if they turn to look back as they reach the door after a conference they find Ike already absorbed in what is next on his schelude.

You would have to get up fairly early to see Ike's office before he arrives and then follow him through a typical day. His office is in Low Memorial Library, a $1,000,000 example of architectural elegance, built in the shape of a great cross. It is the very core of Columbia University and the first main building erected on Morningside Heights.

• • • •

By half past eight in the morning he is in his office, and commonly he starts his day with the Provost of the University, Albert C. Jacobs, law professor at Columbia since 1927. Jacobs has become his chief of staff and really runs the University, exercising supervision in all academic matters. Money is something they have to talk about almost every day. Rising prices made salary adjustments necessary, and every kind of bill that comes along is bigger. In consequence, the $6,180,000 income was not enough this last year by $1,400,000. The deficit is one problem for Ike.

Then Paul Davis comes along every day, and sometimes several times. He is General Secretary of the University, and he is directing and co-ordinating a plan for expanding Columbia power to serve. Everything they have in mind adds up to $170,000,000.

Davis and others have discovered that when they report anything to Ike that he wishes to store in his memory he listens in a special manner. He keeps his eyes fixed right on you, and he never looks away unless you begin to repeat and flounder. Some at Columbia have learned that when Ike's eyes wander it is a good time to change the subject or stop talking. Nevertheless, while he keeps his attention focused and concentrates Ike is learning. At such a time, should he feel the need of a smoke he lights a cigarette in the manner of a hunter keeping his eyes fixed on ducks approaching a blind.

When he reads a report, he reads it carefully. Skimming and doodling waste practically none of his energy or time. Because of his power to turn his mind off some subject and yet, after interruption, go straight back to where he left off, he can be cordial to callers.

A quality of leadership which is ingrained in General Ike is the common touch—the spirit of free and easy comradeship. There is nothing stuffy or upstage in his whole make-up. He is cheerful and approachable. Out of his eagerness to seize hold more rapidly

of the forces he is leading he goes afoot almost invariably on any errand around Morningside Heights. If he stops to chat with an employee of Columbia who is cutting grass on the Green, the next time they exchange greetings the man discovers that General Eisenhower has remembered his name.

• • • •

When I first began to observe the methods by which he was going about his new task, I was impressed by the fact that his headquarters at Columbia stand on the same high ground of Manhattan Island, today called Morningside Heights, which, in the battle of Harlem Heights, marked a turning point in the Revolution and in our national history. From this historic spot General Eisenhower today, at another moment of crisis, assumes leadership in defense of a free America.

Philosophical Bases of Organization and Operation of American Schools

II. THE INFLUENCE OF THE NEW PSYCHOLOGY*

WILLIAM F. RUSSELL

DEAN OF TEACHERS COLLEGE

IN the preceding discussion[1] we considered the way in which American educational administration and the organization of the educational system had developed in relation to the grand purposes of government and social organization in the United States. To use industrial terminology, I described how the Americans developed the *process* to change the *raw material* into the desired *product*. Attention was centered on the effect of American objectives on our education.

Turning to the other side of the picture, we shall now consider the effect on educational organization of what has been learned about the *raw material;* for many educational practices were developed prior to the development of modern psychology and experimental education, and many long-established customs and attitudes toward education were based on ignorance of how children develop, of how they learn and forget, and of how the human mind works.

I shall first describe the spirit and method of American education as it developed in the early days; show how this development was based on a primitive understanding of human nature; discuss briefly a few modern conceptions which have resulted from psychological discoveries; and finally show the changes made and continuing to be made in American education to adjust to this new knowledge and to the new conditions that result from it.

In order to understand American education as it first developed, it must be remembered that in the main it was an importation from Europe, and that just as the structure of American education was at first a copy of the structure of Scottish, English, Swiss, French, or German educational structure, so the spirit and life of the school were also a copy. But it was not a true and complete copy; it was only a partial one. In fact, it was an adaptation of only part of the European system. In order to make this clear, it will be

*The English text of the second of two lectures given in German at the University of Heidelberg, and to audiences of educators and laymen interested in education at Wiesbaden, Jugendheim, Stuttgart, and Berlin, in April, 1948.

[1] "The Influence of American Ideals," *Teachers College Record*, January 1949, pp. 221–31.

necessary to describe European education as it appears to American eyes.

As stated in the previous lecture, the American sees in European education a double-track railroad, one leading to ordinary walks in life, the other to the professions and to government service. The one leads to the soldier in the ranks and the non-commissioned officer, the other to officers in all branches of life. The first continues for relatively few years, the latter for a longer time. The first goes through the *Volksschule*, with few going to higher elementary and vocational schools; the latter through the *lycée* or the *Gymnasium*, leading to the higher professional schools and to the university. The former is for poor people; it takes a certain degree of wealth or exceptional ability to enter the latter. The former is taught by a *Lehrer* or an *instituteur*, the latter by a professor who holds himself above, better than, and different from those who teach in the poor people's school. In fact, one instructs in the former and teaches in the latter; and the pupil learns *(lernen, apprendre)* in the former and studies *(étudier, studieren)* in the latter. The equipment is different; the expenditures are on different levels. There is class differentiation.

In one respect the American visitor can find but little difference between the two types of schools, and that lies in the spirit and method of teaching. The American who formerly visited schools in Germany, or France, or England, or Switzerland, or in almost any other countries of Europe before World War II, was struck by the formal, disciplinary nature of the work in the classroom and of the life in school outside the classroom. To him the pupils (or students) seemed excessively polite, very obedient, always trying to do what their superiors told them to do. He attended class after class in which the teacher would tell the pupil (or student) a sentence or two, and insist on exact repetition; take a sentence in a textbook, expand upon it, and insist on repetition from memory by the pupil. Rarely did the pupil ask a question. Rarely did the course of the class exercise vary from the exact plan of the teacher. The teacher was there to give orders; the pupils were there to obey. The emphasis was on repetition, drill, discipline. It was even surprising to an American to see the children stand up when the teacher entered, and to have them tip their hats when passing him on the street.

The American thinks that he sees in European education a plan to turn out disciplined, obedient, possibly subservient servants of the State, happy to do as they are directed by a superior, and glad and willing, yes, eager, to find someone to give orders which they will be happy to obey. It would seem to the American that the old European system was a plan to create a disciplined mass of people ready to follow a leader.

Now the American visitor must admit that in Europe there was excellent leadership. European people, despite the formal education for the masses, reminiscent to the American of the education of the primitive tribes or of ancient Egypt or China, did not stand

still, without change from generation to generation, as was the case in primitive society or in ancient Egypt or China. On the contrary, European civilization was very advanced in all the arts and sciences, was in the lead in the discovery of new processes and techniques in the sciences and in their application to medicine, technology, agriculture, and the like. How could this changing, adaptable, advanced life derive from so fixed and formal a system of education? The American thinks that he finds the answer in the European university.

In the *Volksschule* or the *école élémentaire* the pupil may learn only to follow and obey. In the *Gymnasium* or the *lycée* he may only follow a pattern and become disciplined. But in the university he enters upon a new life. No longer is he under pressure; no longer must he act according to a set of fixed rules. He is now, to a great degree, his own master. The professor, no longer the slave driver, is now a guide and adviser. There is now no fixed set of books to master or statements from a teacher to learn. There is academic freedom. Even in his personal and social life, the student is free. He is encouraged to vary from his fellows, to follow his desires and interests, to seek the new and unknown. Truly it is a new life. He comes to the university disciplined; he is given a new birth. It is indeed a renaissance. It is here that leaders are made.

Now the Americans imported this system to America, but only in part. Parenthetically it can be said that it is always dangerous to import educational ideas. Just as at the borders of a country there is a quarantine station in which persons suspected of contagious disease must be detained until it is safe for them to enter a country, so there should be quarantine stations for educational ideas, where they could be held until, after test trial and estimate of their full effect, they could be safely permitted to enter the new land.

The Americans imported the elementary school from Scotland and England and Germany. In the 1830's and 1840's, under the influence of Henry Barnard and Horace Mann, they took special inspiration from the German example. Following 1848 a great influx of liberal, intelligent, freedom-loving Germans came to America. They were interested in culture and learning; they profoundly influenced our schools.

The American college first followed the English model. Later, it was enlarged and modified to incorporate the methods of the German university and the French *hautes écoles*. The secondary school followed the pattern of the British boarding school and the Scottish academies. In the preceding lecture I pointed out that, in general, the Americans did not follow the double-track system, but developed one track, with all children going to the elementary school, to the secondary school after that, then to the college, and finally to the university. But the curious fact is that in the elementary school and in the high school and in the college, and to a consid-

erable degree even in the university, the spirit and method of instruction, imported by us, were those of the European elementary and secondary school. Children and students recited what they learned, and did as they were told. Periods of class instruction, even in colleges and universities, were often termed *recitations*, periods devoted to reciting what one had learned. Even in higher education, it was the custom (and to a degree still is the custom) to have lectures, recitations, stated and frequent examinations, and student life under fairly strict discipline. In no educational institution in America was there found the student freedom of the German university. The spirit of the *Gymnasium* and the *Volksschule* pervaded the whole system.

With so rigid a system, which in other countries would develop a lethargic mass of obedient subjects, one might have expected a similar result in the United States. But such was not the case. It is only fair to say that America has held its place in the world, since 1800, in invention, in discovery, and in adaptation to new conditions. I do not think that we can be said to have been backward. Surely we deserve a place among the advanced peoples of the world. And this, despite the educational system. Why? First, Americans, until recently, have always been confronted by the unknown. We had a continent to conquer and settle. The frontier was ever widening; pioneers were always on the march into a country previously unknown; they had to adjust to new conditions; and most of what they needed they had to make for themselves. It is always an inspiration to me to visit museums which have collections of tools and implements made by pioneers. I can show you cherry-pitters and pea-shellers, gunlocks and shoe machinery, garden implements, fabricated by the early settlers at their own forges, not imported from Manchester or Rouen.

Second, in the biological sense the early Americans were a selected people. To leave home, to break all old ties, to endure the hardships of a long, rough voyage in a little sailing ship, and to dare to face the unknown, required an unusual, a nonconforming, person. He took this risk in order to worship God as he pleased; or to become rich; or as a substitute for a jail sentence; or to escape from the consequences of some crime or antisocial act. So America was settled by the variants, the unusual, the people who were different, either better or worse, more idealistic or more mercenary.

Third, America has always been given blood transfusions from Europe through the constant flow of immigration. In this flow have come many who in the European universities had been reborn, revitalized, and thus were flexible, adaptable, and capable of leadership. Many of our greatest leaders were born and educated in Europe.

But the Americans justified the fixed, formal spirit of their school, college, and university by the theory of formal discipline. Benjamin Franklin once said that the advantage of being a reasoning being is that one can find good reason for what one wants to do. Now

the theory of formal discipline is based on the faculty theory of psychology. According to this theory, the mind is made up of a number of faculties, such as memory, imagination, reason, and so on; and the way in which one improves the mind is by exercising these faculties. Just as one makes a muscle stronger by exercise, so one makes the reasoning faculty stronger by using it. Some subjects of study, such as Latin, or logic, or mathematics, were supposed to have special value in training the logical faculty; and if the pupil worked hard, very hard, on these subjects, he was presumed to have trained his reason. Then he could apply his reason to any of the problems of life.

Closely related to this theory of training the logical faculty, and also based on the theory of formal discipline, in turn based on faculty psychology, was a notion possibly best expressed by the aphorism that the best way to train a leader is first to make him a follower; that he who leads best was first the best follower. If you want to develop a boy into a captain of a ship, train him as a common sailor. Many businessmen proudly recall that they began their careers in the humblest position. American army officers are trained at West Point, where they learn to march in order, and are disciplined and drilled to an extraordinary degree. From such a theory is derived justification for the practice that in a nation needing flexibility and adaptability, the proper education to that end is discipline, drill, conformity, much as in the European elementary and secondary school.

No doubt this theory of formal discipline has been used in Europe to justify formal education as basic to the development of leadership, just as it was in America. But there is an important difference. In Europe, professors may advance such a theory but education has not fully conformed; for even if boys in the *Gymnasium* are drilled and disciplined (on the theory that such an educational method is basic to later leadership), upon entering the university they are reborn and enter on a different educational program. In the United States, however, the same disciplinary method was followed, sometimes in even the highest institutions.

It is fortunate that psychology and the science of educational experimentation and investigation have made such great advances in recent years. Without the results of modern science, America might have been doomed to general decline and decay, for the true sources of our national flexibility and ability to adapt have vanished. No longer have we an unexplored frontier to settle. No longer have we the full force of a selected population; and the flow of new blood and new ideas through immigration has been greatly diminished.

When the psychologists and educational researchers attacked this problem of formal discipline they found little to substantiate the notion that there were general values of importance in otherwise relatively useless subject matter. Apparently, when one cuts down the size of the teaching process to a small piece, and studies

that piece intensively and under controlled conditions, relatively little is found to transfer from one specific learning to another. Certainly nothing more transfers from the study of Latin or logic or mathematics than from the study of history or science or even of more practical subjects such as surveying or home economics. Knowledge of the rules of formal grammar has little effect on the grace, beauty, or even the correctness of English composition; knowledge of the syllogisms appears to have little effect on logical thought. There is little justification for the idea that mere hard work on any subject matter increases mental power.

One fact does emerge about transfer of training. As a result of the discovery of intelligence tests, psychologists have found that there are innate differences in mental ability; and tests have been developed by means of which exceptional mental talent can be recognized. One ability of the very intelligent is to transfer to new situations what they have learned in old situations; and this fact is an additional explanation of the popularity of the formal discipline idea. What the old subjects and old methods of teaching did do was to act as a screen. Those who had been especially endowed by God could secure more general value from formal and hard studies than could those of lesser abilities; and since Latin and mathematics, plus other factors, served to discourage the less able, only the more able continued in school. Old professors can hardly be blamed for taking credit to themselves and their subjects and their methods for what in fact was attributable to heredity.

Psychologists and educational researchers have also attacked, under controlled conditions, the question of obedience as contrasted with initiative, of following as contrasted with leading; and of the degree to which a learning process directed toward securing obedience will yield initiative, directed toward conformity will achieve flexibility and also leadership. Here again science gives little comfort to the old ideas. If you teach to secure obedience, and teach well enough, obedience is precisely the result, and obedience only in that particular situation, not obedience in general. If you teach to secure flexibility, and teach well enough, that is what you get, and not obedience or conformity or something else. Any other theory is absurd, and is, in fact, contrary to our experience.

For illustration, sailors on shipboard are quite as disciplined as any body of men in the world. They live in close quarters. Instant obedience to an order without question may mean the difference between life and death. For long periods of time they do as they are told. Nevertheless, when they have shore leave, their conduct certainly is not in conformity with shipboard demeanor. Men, staid, tried and true at home, in their offices, in their families, have one sort of conduct; let them go to a convention in a strange city, or on a trip alone, and what a different life they lead!

One notable series of experiments on this problem, under carefully controlled conditions, with full records in

motion pictures and every word spoken preserved on the sound track of the film, revealed how strict disciplinary teaching made for perfect conduct in a classroom—but only so long as the teacher was present. The results of these experiments indicate that mere hard work or drill has little effect, but that a very different type of teaching will yield good manners or good behavior.

Modern educationists are convinced that it is safer to regard the teaching process as a summation of thousands of *separate teachings*, that each has a specific result, that it is safer to work for specific, smaller aims and not to count on generalized results. If you are working to create a static society, like that of the ancient Chinese or the Pueblo Indians, have a disciplinary system. If you are working for a flexible, adaptable society, it would be better to devise a new method and plan. When the German armies were confronted with the problem of developing parachute troops, men who had to drop down from the skies into unknown territory, men who might be separated from their officers, or officers separated from their men, they developed a new plan of education with novel methods. This was fully described in a book we read during the war, *German Psychological Warfare*, where a most interesting account was given of how the Germans prepared the airborne troops to be ready to meet the unknown. The same book also described how the German officers were instructed to abandon the old German army plan of relationship of officer to men, and how a new plan of more intimate and friendly relations provided more efficient discipline.

Such new knowledge of the human mind and its workings sheds light on the raw material with which teachers have to work; and it blasts the old theories that buttressed outworn educational practices, thoughtlessly imported from Europe and wrongly used to justify educational practices unsuited to American ideals. For America, devoted to liberty and equality, was not designed to have one class of leaders and another of followers. Not only should posts of leadership not be passed down from father to son, or held in one family or in groups of families or in one social class; not only should each boy or girl have the chance to assume as much responsibility as his ability and zeal will permit; but in a true sense, every American citizen must to some degree or another at all times, and to a high degree at certain times, be both a follower and a leader. In some respects he must conform; in others he must be adaptable and lead; and the educational process must be directed to each of these ends. Modern psychology teaches us that these processes must be kept separate; must alternate; must go on in a parallel relationship; and that methods either all one way or all the other, or a colorless compromise between the two, will inevitably fail.

It is a great pity that the educational scientists had to demolish the doctrine of formal discipline. Formal discipline was such a convenient doctrine, so easy to administer and so inexpensive to carry out. It did not put too much

strain on the teacher, because it is not difficult to learn to be a drillmaster. You take your rod in hand, actually or hypothetically, and you beat knowledge into the pupil; and since such knowledge, according to your theory, has great value of wide application, you can rest content with your task. Furthermore, you do not have to worry about what to teach—the old subjects in the old way are thoroughly satisfactory. You need not trouble yourself about building tailor-made educational suits to fit the individual measurements of your customers; one factory-made suit will fit them all. Procrustes could have taught well under this system.

But with the downfall of the doctrine of formal discipline, a whole Pandora's box has been let loose upon the modern educator and administrator. Teachers have to be far more skillful than ever before; special ways must be devised to suit a great variety of educational aims. How to teach, under these conditions, to these ends, is no child's play. Nor can the ability to perform this task be gained by apprenticeship or in any modest normal school in a short time. New attention must be paid to *what* to teach, with consideration of the content of courses of study and of the distribution of subject matter.

Furthermore, not all children can follow the same track, the same program of education. Some must go one way, some another; there must be thousands of patterns. And the choice of what particular pattern to follow cannot be left to chance, to the whim of a parent, or to the prejudice of a teacher or community.

This is why, in America today, great attention is being paid to orientation of pupils and students—to what we call *guidance*. We are coming to include in our programs of teacher training great attention to educational guidance—the choice of a school and college program; to vocational guidance—the choice of an occupation for life; and to psychological guidance or counseling—the analysis of aptitudes, abilities, and disabilities, and their stimulation or alleviation. It is also becoming the practice, to an increasing degree, to add to the larger schools specialists in guidance, who devote their whole time to counseling the pupils and their parents.

What, then, are the administrative changes in American education that are being devised to adapt the school system to this new knowledge of our raw material?

First, as shown in my previous lecture, we have a single-track system, with the elementary school, secondary school, college, and university all in line; with children progressing through this system according to their ability and zeal. This system is coming to have the same spirit and method from bottom to top, with specific teachings sometimes directed toward conformity, sometimes toward flexibility. There is no greater or lesser academic freedom at bottom or at top; no greater discipline at one point than at the other.

Second, to work in this program, there is coming to be a better, longer

and more skillfully devised program for the training of the teacher.

Third, there is a tendency toward unity in the teaching profession—not wholly achieved—toward equality of status irrespective of sex and of type of school or college. For instance, even the elementary school teachers in New York City are paid higher salaries than many college professors in smaller communities.

Fourth, owing to the breakdown of the theory of formal discipline, there has been increased attention to the problem of *what* to teach. Old distributions of subject matter now are known to be inadequate, and new attention must be paid to the curriculum. It is now standard practice to attach "curriculum experts" to city school staffs; to create committees for curriculum development in the various states and cities; and to experiment widely with new materials and new media of instruction, such as the radio and motion pictures. Over a dozen notable reports from state and national authorities have appeared within the last decade; and analysis of these reports indicates that curriculum experts are now thinking, not in terms of so many hours of Cicero, or so many words to be spelled, or so many propositions of Euclid to master, but in terms of such problems as:

How to help to introduce the youth to his job, by guidance and by work experience in high school.

How to solve the problem of illness and remediable defects that were revealed by such shocking numbers of young men who were physically disqualified for the army.

How to make the pupil and the school a more vital force in the local community.

How to adapt the school, previously suitable only for the bright, to the needs of average and slow learners.

How to develop tolerance and cooperation in communities where there are racial and religious tensions.

How to select and encourage the exceptionally able youth.

How to produce what some call "economic literacy" and give a sound basis for resistance of the utopists and sometimes malicious economic theorists who blithely disregard the experience of the past.

How to give religious instruction, or permit it, in a secular system of schools.

Thus the trend in America today, in the philosophy of school administration that is becoming dominant and is gaining adherents steadily, is to bend the organization of our schools to the kind of government and society envisioned by the Fathers of our country, to have one school system from bottom to top, free and open equally to all. If families differ in wealth, make the school compensate for those differences. If educational opportunity varies in proportion to the distance that families live from schools or colleges, provide scholarships, financial assistance, and transportation. If children differ in abilities, provide different types of educational programs of varying length, but encourage each child to make the most of his talents and energies. For the crippled, blind, or deaf provide special opportunities. Eliminate the distinctions among various types of schools, between the sexes, and have teachers and professors under-

stand that they are component parts of one system, each with his particular and peculiar importance.

So far as content of the curriculum, methods of teaching, and spirit of the school are concerned, we must remember that in a government of the people, by the people, and for the people, in a society conceived in liberty and dedicated to the proposition that all men are created equal, all in childhood must learn to some degree to follow and to some degree to lead. Each goal is specific. Each requires a special method. One learns to perform many acts of a *following* nature. One also may learn to perform many acts of a *leading* nature. The summation of many such acts may have some general transfer, on which, however, it is better not to count too much.

When it comes to the feeding of animals, or the growth of plants, or the control and use of electricity, or the development and control of atomic power, societies expend limitless resources, human and material. But when it comes to research on the development of our children and on the control and direction of human beings by other than police methods, we turn aside and look in another direction.

If man is to learn to enjoy his "natural rights," to quote Benjamin Franklin, "to provide just, permanent and proper forms of government" and come to "attain a degree of earthly happiness," this can be done only by proper schools and proper agencies of education. This can come only by a wise and statesmanlike philosophy of school administration. This can come only from statesmen and educators, political and educational scientists who can envision what they want their country to be, who can peer into the dimly understood processes of the human mind, and with clear grasp of these two concepts can devise an educational system to help the latter to fit the former.

As an American, a child of the Enlightenment, a modern exponent of the eighteenth century's faith in man and mankind, a believer in liberty and equality and in fraternity (that century's way of saying international peace), I can only hope the world will turn its back on primitive and outworn philosophies which have resurged in modern times and still hold sway in many parts of our world.

Philosophy As Process*

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PHILOSOPHY is a name for the process by which people come to make sense from the disorder of common experience. There is a philosophy for every kind of use and for every kind of person. Whether or not the person is a philosopher depends upon a variety of factors, but in all cases it is important to remember that the philosopher is a person whose philosophy is a record of the process through which he has gone in trying to straighten out disparate elements in a field of reality.

There are philosophies of many forms of knowledge—a philosophy of art, of life, of religion, of science, of society, of history, of literature, of education, and there is even a philosophy of philosophy. A philosophy of philosophy is what professors of philosophy talk about at their annual meetings and write to each other in their journals. It has the disadvantage of not being about anything but itself, and, accordingly, is seldom related to anything very useful or very interesting.

The philosophy of education usually labors under the same disadvantage. It is only about itself, and is taught to people who go on teaching it. Occasionally, a philosophy of education is put into practice in a class, in a method, in an organization of curriculum, or even in an institution, as at Sarah Lawrence or Bennington. (As a matter of fact, when I look at what we do from day to day at Sarah Lawrence and what I believe in, I think that the basis of Sarah Lawrence lies in the simple fact that we bring some very good people together who are interested in creative knowledge and young people, we bring as lively and good a group of young people as we can find, and make it easy for them all to learn from one another. That is about as much theory as I'd care to venture at this point in our discussion.)

But any philosophy is only as good and as real as the events, facts, people, and values of which it is an expression. It is my view, and here I make a philosophical assumption which I shall not pause to prove, that knowledge is an outcome of living, that it is difficult to avoid living, and thus having knowledge, and that the experience which gives us knowledge is the awareness of fact and value achieved through an unavoidable activity best described by Whitehead's term *prehension*.

Man exists. That is my first fact. In his existence he becomes aware of the

*A talk given at a meeting of the Philosophy of Education Society at Teachers College, February 11, 1949.

conditions of existence. He feels himself to be part of a process, and, in the process, learns to distinguish symbols, concepts, ideas, and values as focal points, or, to change the language, he finds anchors to reality. By the awareness of process in its reality, he gradually puts a universe in order, he learns what values and ideas can be trusted, and, in spite of himself, he is educated to live. If he denies the common experience of the race, if he sees and feels events which do not occur in the experience of others, if his clues to reality depart too abruptly from the patterns we have come to accept as real, his mental health is said to be endangered, and his unique set of symbols provides a separate world into which he retires.

But the concepts, thoughts, and symbols have no independent reality as such. They are individually created by each knower and only serve as a set of rough approximations to the reality they express. They point to the places where experiences may be had and where private truth may be affirmed or denied. For the truths are in the knowing, and the truth is in the process, not in any final forms in which the process may express itself.

Accordingly, philosophy is not a subject. It is a process of refining and ordering experience and values. Truth itself is both fact and value, the fact valued, and the valuing of fact. The philosopher is one who has developed an oversensitivity to the ordering process, and who is not content with reality as it is commonly expressed. His pathology is that he cannot rest with things, thoughts, or feelings. He sees relations among things normally felt to be disparate, and sees differences between things normally felt to be the same.

Each of us begins to be a philosopher when he pushes his plain inquiry past the immediate places, where thinking does not ordinarily go. Once there, in the less immediate places, one's thinking becomes more and more complex and interesting, since the world is seen to be more and more complex. It is at this point that the study of some of our greatest thinkers, who have simply been going through this process in public, can be most meaningful and insights from their work can be most helpful. It is essential that the barrier between the philosopher and oneself be broken, that the great thinker be admired, not as one who has seen truth hidden from the rest of man, but as one who has undertaken the process of thinking at a high level and in a successful way. From him we can learn how to engage ourselves as thinkers in the process of speculative or analytical thought. Nor can we give all philosophers equal respect. There are great minds of the past who have devoted themselves to questions which should never have been asked, but which seemed important at the time. Other questions have been raised by great thinkers only because unnecessary assumptions had already been made and logical paradoxes created for which the form of the question provided no answer. One question of this kind seems to me to be the muddled one about the relation of body to mind. It is only

because philosophers have insisted upon putting these two words apart, that they have had to plague themselves with the necessity of bringing them back together.

The function of philosophy is therefore to involve each one of us, by whatever means it can, in the process of relating and ordering. Yet philosophers themselves, when they are housetrained and working for a living in a university or college, seldom make that attempt at involvement on behalf of their pupils. Owing to the inhibiting and paralyzing educational system of courses, requirements, credits, and departments, which masquerades under the name of higher learning in this country, the study of philosophy is not a means to the enrichment of life, but a means to the possession of tedious information. One of the reasons for this is pointed out by Mr. Squeers, who, in the course of some random remarks in *Nicholas Nickleby*, explains a neglected educational principle to a friend.

"Measles, rheumatics, hooping cough, fevers, agers, and lumbagers," said Mr. Squeers, "is all philosophy together; that's what it is. The heavenly bodies is philosophy, and the earthly bodies is philosophy. If there's a screw loose in a heavenly body, that's philosophy; and if there's a screw loose in an earthly body, that's philosophy too; or it may be there's a little metaphysics about it, but that's not often. Philosophy's the chap for me. If a parent asks a question in the classical, commercial, or mathematical line, says I, gravely, 'Why, sir, in the first place, are you a philosopher?' 'No, Mr. Squeers,' he says, 'I a'n't.' 'Then, sir,' says I, 'I am sorry for you, for I shan't be able to explain it.' Naturally the parent goes away and wishes he was a philosopher, and, equally naturally, thinks I'm one."

There are many in American academic society who play Mr. Squeers' game. The philosophers are those who guard the territory of a special subject matter for initiates, or, in particular circumstances usually referred to as cutting across fields, are willing to share their subject matter with others who are not philosophers. There are those who conceive the task of the philosopher in his relations with the rest of the human race to be that of handing over the Western tradition to those more innocent in these matters than himself. The fact that philosophy exists only because men and women have thought deeply and hard about the conditions of their existence and the enormity of their fate, has been ignored and denied. In place of the incitement to speculation, the challenge to original thinking, and encouragement to imagining, we have placed in our academies the deliberate survey, the careful history, and a set of philosophical problems inherited from the past, and now used as a testing device for the memory. In the mind of most students, philosophy thus remains a set of opaque signs and symbols, behind which sit truth, beauty, and the famous philosophers.

To set minds working at questions of deep significance to our lives is the task of the philosopher who teaches. Since the ultimate object both of education and of life is to make human action wise and good, the function of

philosophy in achieving that end is to aid the individual to come to an understanding of wisdom and goodness so clear and so firm that that understanding has a part in the future regulation of his conduct. The unifying set of values by which understanding could be found formerly rested in the Greek and Latin classics, in logic and rhetoric, and in Christian ethics. The student's whole educational career, whether as an undergraduate or as a professional, was moving toward the development of a coherent philosophy.

Now, of course, with the secular influence of scientific thinking, and the disintegration of knowledge into small units of intensive study, the new professional thinker, employed by universities to teach, is a man more interested in logic than in ethics, more interested in private philosophical research than in young people. The moral influence of the philosopher has thus declined, and his effect upon the character of the young is slight in the face of amoral influences in the rest of the curriculum and the rest of human life.

It is now true that the classical unity of knowledge and value has been threatened and finally broken—in education, by the increasing strength of the natural and social sciences; in society, by the increasing pressure of material conditions, whose ultimate philosophical expression is that of the intellectual and moral nihilism of German and Italian fascism. In this country, philosophers have failed to provide either the intellectual or the moral leadership which can aid our youth to find the modern philosophy they seek. They have been concerned with other matters, with commenting upon the creative thinkers of the past, catching each other out in logical mistakes, analyzing the meaning of words, and consolidating academic position. As now constituted, the academic environment of the philosopher in America is unfavorable to original thinking, either by its professors or by its students. Accordingly the creative gift has been lost, and we have few thinkers who speak to the world about the present condition of man. That task is performed outside the academies, by journalists, novelists, scientists, clerics, poets, and politicians, each of whom is helping to make a modern synthesis, but without the breadth, nobility, and depth of perception which are the mark of the creative philosopher.

The philosophy which can provide the needed unity for education in a modern world is that of organism and of process. If the total educational process is considered as a growth toward a maturity on the part of individuals, then each part of the process must be organically related to that central idea. In a very real sense, every course becomes a course in philosophy, since the purpose in all teaching is to help develop men and women who think critically, wisely, and enthusiastically about man and nature. Philosophy can therefore contribute to education its insights into human nature and its discrimination among human values, and can help to frame new propositions about human action and destiny, in order that the actual edu-

cational process for each student may form itself around fresh and active ideas.

It may perhaps have become clear that I believe I have a firm grip on one part of the truth about education, philosophy, and on one or two other matters. I do not press that truth upon you as something you must believe in order to be saved, but only as a set of views to which I have become warmly attached and with which I can live very nicely. As a matter of fact, they are not only congenial companions, but give me a great deal of aid in the conduct of my own life, which very often becomes more complicated than I formerly thought possible. If there are other ideas which hold things together better for other people, I raise no serious objection, although I cannot help thinking that not to believe in some such way as mine is a sign of mental and moral weakness, obtuseness, stubbornness, or vested interest in other wrongheaded conceptions. Naturally I shall continue to keep an open mind about all this.

I should like to say something about the application of the philosophy of process to the particular questions in which the members of this conference are bound to be interested. The first question I am forced, unwillingly, to raise is, why are there philosophers of education who form a trade union, syndicate, or guild, and who meet to raise questions about their own right to exist, or, perhaps, to put it another way, to defend their territory against an invasion by non-members? To me, philosophy, in a large measure, is identical with education. To educate is to philosophize, and to do philosophy is to raise questions about the moral and aesthetic values in life, or, to begin the first part of a process of thought which leads naturally into the implications of thought for action. The philosophy of an age, a culture, or a civilization provides the general set of principles upon which educational systems rest, and, on the other hand, is made up of the continuously changing and reforming concepts which emerge when people live together in societies and express their attitudes and ideas in thought and action. Therefore, the processes of society, as shown through educational systems, merge with the processes of thought expressed in philosophies, and a large area of identity is established.

The meaning of this for making institutions in which teachers can best learn their art, is that, in order to be effective, a philosophy must run through the entire institution, and its presence must be felt in every phase of life there. This idea, if taken seriously, would do a great deal of damage to the curriculum and practices of most colleges where teachers are trained. It would raise havoc with various courses in method, in the psychology of education, the history of education, and the philosophy of education. I believe that each course should deal with the basic materials of the disciplines it represents, and that those materials should be related specifically to the individual needs of the students who are to become teachers. I do not think there is a basic distinction to be made between a teacher and any other kind

of human being who takes seriously his own talents and personal growth. This is a matter of degree. All those who are well educated, in terms which I should recognize, are people who are seriously interested in life, who enjoy it, who know things, and who want to share what they know with others, in as enlightened and persuasive a way as possible. The distinction to be made between the teacher as a person and anyone else is that the preoccupation with sharing is a little more severe in the case of the teacher.

If this is true, then to teach the history of education is to help students to learn about the history of man, or of particular men at a particular time (for example, the past one thousand years), with special reference to the way in which educational systems have sustained or destroyed the civilization under discussion. The psychology of education is the study of the things we know about human nature, with special reference to the way in which these things can be used in teaching and learning. The philosophy of education is the study of the history, context, meaning, and value of certain relevant ideas which are significant in the development of cultures and civilizations, with special reference to the way in which the ideas have been used to give intellectual support to educational systems. These ideas are the germ cells around which schools and colleges have grown, and find their physical expression in buildings, people, equipment, and techniques. The latter consist in the mechanics of operation, and can best be learned about through the actual involvement of the teacher in the mechanics of teaching, so that the ideas, and the ways in which they are used, become in fact one single process. The study of mechanics is a valuable part of any professional preparation, but only if it is related constantly to the purpose for which the mechanics have been invented.

If we approach the philosophy of education in this way, we are at least moving toward a resolution of certain problems which bother us all in the preparation of teachers. I do not think we need bother overmuch about the title by which the philosopher of education goes. The philosopher of education is a philosopher or he is not a philosopher of education. When he teaches, he is dealing with social issues, metaphysical issues, moral issues, aesthetic issues, in fact, with the whole of the universe of discourse in which man and his destiny are involved. I am not recommending the disbanding of the guild. I am suggesting that if each of us does not consider his major task to be that of communicating to his students the notion of what it feels like to be a philosopher, he is descending to the manipulation of subject matter and the training of the student in separate techniques.

Nor do I think there is one answer to the question as to whether or not the philosopher who is a philosopher *of* education should deal with the famous philosophers or with only the problems of philosophy. I have found, during the past four years, that a great deal of confusion on this point exists among educators. I have found a series

of unpleasant alternatives placed before me, by those who write and speak on these subjects. Here are some of them. Should we deal with the problems of life today, and discuss what we think of them, and persuade our students that it is *their* thinking which is important, or should we deal with the disciplines of philosophy as written by the great thinkers of the past? Should teachers of the philosophy of education be trained as experts in the history and subject matter of philosophy, or should they be social scientists, psychologists, economists, or even physicists who have learned to talk and act like philosophers at certain times for the benefit of students? Should students who will teach be taught philosophy, or should they receive all they need of this from the general context of their college life?

I believe these to be a set of unnecessary questions, providing unnecessary alternatives. One of the difficulties with the profession of the philosopher of education is that his intellectual status is put somewhere below the noneducational philosopher, and somewhere above the teacher of such technical subjects as administration or business management. I believe that in certain cases he feels uneasy about his situation, and feels inferior to the teacher who has not been tarred with the *philosophy of* brush. The solution to these discontents seems to me to be that we must conceive the role of the philosopher of education in a different way. The social scientist should examine the implications of his data for general social and moral issues. He is thus philosophical to a degree, if he is a good social scientist. The psychologist is in the same situation. Not to be philosophical or speculative, or conscious of relationships, is to be a narrow person, making a living by dispensing information. But there remains an area of the college curriculum in which the whole of one's attention is placed upon the problems and the knowledge of the philosopher, where it is valuable to deal explicitly with the process of philosophy. This, of course, cannot be done in isolation from the knowledge of any other field, where such knowledge becomes relevant. Since the students come to philosophy with an assortment of knowledge gained from a number of sources, it is impossible to isolate the teaching of philosophy from the rest of life, unless very explicit efforts are made to do so.

I believe, therefore, that it is not essential that the philosopher of education always begin with a problem in the minds of the students, in contemporary life, or in any other area. This is only one way of beginning. A good deal of the time, students have no philosophical problem in mind until it is put there. Nor do I believe that it is essential for the philosopher of education to begin with education, or with the works of Plato, or with any particularly favored author. The process may begin at any point. It might begin with the reading and discussion of the ideas of Stephen Spender, of T. S. Eliot, of Santayana, of Karl Marx, of Aristotle, or with John Dewey. The value lies in the creation, in the minds of students, of a fund of knowl-

edge and an attitude of searching whose exact form will vary in each student, and whose systematic development through a course of study will depend upon the degree of system which is possible with individual teachers in situations with individual classes. To read the works of the great philosophers, and to understand their ways of thinking, are important phases of the growth toward wisdom. If the works are read out of relation to the contemporary spiritual crisis, or if the students perform their assigned tasks as a duty in the struggle toward gaining a degree, nothing of serious educational value will come of it.

There are as many roads to the attainment of wisdom as there are people who undertake to walk them. There are as many solid truths as there are people who can search them out and stand on them firmly. There are as many ideas and ideals as there are men of good will who will hold them in their minds and act them in their lives. There are as many philosophers as there are men who will give themselves up to the joy and rigor of continuous thought about man's existence. For these, to think in private, or to speak in public, is to educate oneself and others. Education and philosophy thus become one continuous process.

Item Selection by Sequential Sampling*

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THE procedures of sequential sampling developed during the war by mathematical statisticians have been effectively used in industry to reach decisions about the quality of a manufactured product from an examination of the smallest number of items which can give the required degree of confidence. The methods are expeditious and are particularly valuable in situations where the use of a large sample would involve great cost, either because examination of an item is difficult or laborious, or because it is possible only through destruction of the item examined.

In general, the sequential sampling process involves the following three steps:

1. A very small number which we may call α is selected arbitrarily, say $\alpha = .05$. When the proportion of defective articles in a sample from a batch is less than this number, the batch is accepted and the process of manufacture assumed to be satisfactory.

2. Another number which we may call β is selected arbitrarily, say $\beta = .20$. When the proportion of defective articles in a sample is larger than this number, the batch is rejected and the process of manufacture investigated on the assumption that something has gone wrong.

3. When the proportion of defective articles in the sample is larger than α and smaller than β, the decision is neither to accept the batch nor to reject it, but to continue sampling until the proportion of defectives becomes either larger than β or smaller than α.

As the difference between α and β is made larger, the area of indecision is increased and the cost of inspection rises. As α is made larger, there is greater risk of including a defective batch but less risk of delaying decision on a good batch. As β is made smaller, there is greater risk of rejecting a good batch but less risk of delaying decision on a poor one. The choice of α and β must be made in the light of the seriousness of these various outcomes. Once the mathematical work which provides the theory for sequential sampling is done, the actual operation of an inspection process can be carried out by very simple rules of thumb.

The general methods of sequential sampling can be used to provide an extremely quick and simple routine for the selection of test items, once the appropriate probability tables are made available.

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In the present discussion this routine will be described and a portion of one of the necessary tables will be presented and its use illustrated on a set of 8 test items.

The response to each item is scored as either right or wrong. If there are omissions, the research worker may choose whether he will treat omitted items as wrong or will remove from the analysis of a particular item those individuals who omitted it. In computing biserial r's for a large number of items, the second procedure may add considerably to the computational labor. In the sequential analysis to be described here there is no appreciable difference in the amount of computation required by the two procedures, and the research worker is free to consider only the logic of the situation.

The proportion of wrong answers or right ones (whichever is smaller) must then be obtained for each item. No other computation is required, only observation, counting, and reference to a probability table.

The hypothesis to be tested is that there is no relation between the criterion on which the individuals were ranked in order and the correctness of response to the item under consideration. This hypothesis has usually been explored by means of biserial r, in which case it is more explicitly stated as the hypothesis that in the population from which this sample was drawn the persons answering this item correctly have the same mean criterion score as those answering it incorrectly.

Another appropriate hypothesis by which the relation between item response and criterion can be explored is the hypothesis that in the population the proportion of individuals answering an item correctly is the same, regardless of whether those individuals are at the top or the bottom of the distribution with respect to the criterion, or in other words, that the order established by the criterion is a random one with respect to correctness of response on the item under consideration.

The method of biserial r requires a scaled trait as criterion and also requires that the size of the criterion group shall be determined in advance. Consequently, that criterion group is often much larger than is necessary to establish the validity or non-validity of a particular item. Moreover, if omitted items are not classified as wrong and if the number of individuals is allowed to vary from item to item, the labor of computing biserial r is increased. On each of these three counts the method to be described here appears preferable to that of biserial r.

Let the individuals who have been tested be arranged in order from highest to lowest on the basis of total test score or of any other relevant criterion. Ties in score will not invalidate the procedure, but the order should be definitely established before item analysis is begun. Two or more subjects with the same score may be assigned ranks by a random process, by alphabetical order, or even arbitrarily, provided the person ranking them does not first examine their standing on a specific item. If no scaled trait can be found to use as a criterion, but indi-

viduals can be classified in a series of ordered categories, then these categories may be considered the criterion. Individuals within a category must be assumed to be of equal merit with respect to the criterion and the order of individuals within a category assumed to be random. The broader the categories the less effective will be the procedure.

Let A be the group of individuals occupying the first n positions at the top of the list and B the group of individuals occupying the last n positions at the bottom. We shall not determine n in advance, but shall allow it to vary from item to item as the requirements of the investigation may demand.

Some small number of individuals n is now chosen from each extreme, beginning with the two most extreme individuals and working back toward the middle. A particular item is studied on the basis of this small number of cases ($2n_1$) and one of three courses of action is decided upon: (1) to make use of the item because it appears to be inconsistent with the hypothesis that item response and criterion are independent, (2) not to use the item because it appears too consistent with that hypothesis, or (3) to increase the size of n and study the item further before reaching a decision. If the third course of action is followed, one more individual is taken from A and one more from B and the procedure repeated.

The choice among these alternatives can be based upon a simple count of the number of right answers made by the small groups in the extremes. The number of rights and wrongs requisite for a decision varies with the difficulty of the item, however, and a separate table is needed for each separate difficulty level.

If an individual in Group A answers an item correctly or an individual in Group B answers it incorrectly, that constitutes a *success* in classification for the item. Conversely, if an individual in A answers an item incorrectly or one in B answers it correctly, that is a *failure* for the item. Thus item 1 on the Specimen Work Sheet is successful for the 5 most extreme individuals ($n=5$) at each end of the distribution and fails in only 4 out of the 20 most extreme cases listed there ($n=10$).

Column 7 in the accompanying probability table shows the probability that if an item of difficulty .4 or .6 has no discriminating power it will by chance correctly classify a given number of individuals in a sample of $2n=14$. It can be seen that the probability of 3 or fewer failures is .020 + .005 + .001 + .000=.026. As this probability is small, any item which correctly places 11 or more out of 14 individuals may be accepted at once without further investigation. Similarly, the probability of 3 or fewer successes is also .020 + .005 + .001 + .000=.026. However, it will not often happen that such an item places almost all individuals incorrectly. That is scarcely an admissible alternative in a test constructed with any skill at all. If an item had 3 or fewer successes it could presumably be retained and the

PROBABILITY TABLE FOR USE IN ITEM ANALYSIS

ITEM DIFFICULTY = .4 or .6

r	n 3	4	5	6	7	8	9	10	11	12
0	.014	.003	.001	.000	.000	.000	.000	.000		
1	.090	.029	.009	.002	.001	.000	.000	.000		
2	.236	.107	.041	.015	.005	.002	.000	.000		
3	.320	.221	.115	.051	.020	.008	.003	.001	P	
4		.280	.208	.120	.059	.026	.010	.004		
5			.252	.196	.122	.065	.031	.014		
6				.231	.186	.122	.069	.035		
7					.214	.177	.122	.072	Q	
8						.201	.170	.120		
9							.190	.163	R	
10								.180		
11										
12										

Note: n = number of individuals examined at each end of distribution; r = number of individuals incorrectly classified.

If item falls in Region P it may be accepted at risk of including about 5 per cent of non-discriminating items.

If item falls in Region R it may be rejected. This practice will retain for later examination less than half of the non-discriminating items.

If item falls in Region Q sampling is to be continued by increasing n to $n + 1$.

directions for scoring it reversed, but this situation will be very rare.

The cell entry of .214 in the same column represents the probability that a non-discriminating item will in a sample of $2n=14$ show 7 successes and 7 failures. The probability that it will have 6, 7, or 8 successes (or failures) is .186 + .214 +.186=.586.

Now let us turn to the Specimen Work Sheet. Actually it would not be necessary to copy off the test results on such a sheet. If there were, say, 500 individuals, the papers might merely be arranged in two piles, one running from 1 to 250, the other from 500 to 251, and these two piles placed before the investigator, who would start with the top papers and count successes until a decision was reached by reference to the Probability Table.

To illustrate how the process works, the Specimen Work Sheet presents the records on 9 items of a few extreme

individuals at each end of a distribution of 500 individuals. The testmaker has presumably already found for each item the number of individuals marking that item correctly, which may be called the difficulty of the item, and he has discarded those items for which the difficulty is near 0 or near 1. When a full set of the necessary probability tables is available, the testmaker will use in connection with each item a table made up for the difficulty of that item. As the only table reproduced here is for difficulty .4 or .6, all items on the Work Sheet are presumed to be of difficulty .4 or .6.

Consider item 5. For $n=3$ there are 4 failures, namely W for subjects 1 and 3 and R for subjects 499 and 498. The cell for $n=3$ and $r=4$ is not shown explicitly on the Probability Table but instead we consider $n=3$ and $r=2n-3=2$, which is in Region P. Sampling must be continued.

For $n=4$, there are the same 4 failures. The cell $n=4$, $r=4$ is in R, and the item is discarded after examination of only 8 individuals. Had further sampling been employed, the outcome would have been as follows:

$n=5$, $r=2n-6=4$, Region Q
$n=6$, $r=2n-8=4$, Region Q
$n=7$, $r=2n-8=6$, Region Q
$n=8$, $r=2n-9=7$, Region Q
$n=9$, $r=9$, Region R
$n=10$, $r=10$, Region R

Of the 9 items shown in the Work Sheet, items 4 and 5 would have been rejected after examination of 14 and 8 cases respectively; items 1, 2, 6, 7, and 9 would have been accepted after examination of 6, 10, 10, 18, and 10 cases respectively. Item 8 would still be in doubt after examination of $2n=20$ individuals, and the small fragment of a probability table reproduced here does not permit the examination of enough cases to resolve that doubt. Even when much larger tables are

SPECIMEN WORK SHEET

CODE NO. OF INDIVIDUAL	ITEM 1	2	3	4	5	6	7	8	9
1	R	R	W	R	W	R	R	R	R
2	R	R	R	R	R	R	R	R	R
3	R	W	W	R	W	R	W	R	
4	R	R	W	W	R	W	R	R	R
5	R	R	R	W	W	R	W	W	W
6	R	W	R	R	W	R	R	R	R
7	R	R	W	W	R	R	R	R	
8	R	R	W	R	W	W	R	W	R
9	W	R	W	R	R	W	R	W	R
10	R	R	W	R	W	R	—	R	W
.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.
491	R	W	R	W	W	W	—	R	W
492	R	R	R	W	W	R	W	R	
493	W	W	R	R	W	W	R	R	W
494	W	W	R	R	W	W	W	W	R
495	R	R	R	R	R	R	R	W	W
496	W	W	R	W	R	W	W	R	
497	W	W	W	W	W	W	R	W	W
498	W	W	R	R	R	R	W	R	W
499	W	R	R	R	R	W	W	R	R
500	W	W	R	W	W	W	W	W	W
Decision	+	+	*	−	−	+	+	?	+
n	3	5	8	7	4	5	9	10	5

R = Right W = Wrong
Blanks indicate omitted items
+ = Retain item with present scoring
* = Retain item but reverse scoring
− = Reject item
? = Continue sampling

available there may be some items for which the decision cannot be reached on any small value of n. The testmaker will set up his own rule concerning the disposition of an item which remains persistently in Region Q after a specified number of individuals have been examined. If items are scarce it may be preferable to err on the side of including a non-discriminating item rather than to risk losing one with some discriminating power. If items are plentiful and it is important to make a brief test with high power of discrimination, it may be preferable to risk losing an item that has some value rather than to risk including a non-discriminating item. In either case it may be preferable to terminate the process at some arbitrary point and risk a wrong decision rather than to expend additional time in further sampling.

The steps which have been spelled out here in tedious detail can actually be performed with great rapidity.

There is every reason to believe that sequential sampling will prove extremely useful in certain kinds of educational investigations other than item selection. In situations where data are easily obtained and large samples are readily secured, it will be relatively unimportant. However, in situations where cases are rare and difficult to obtain, or where measurement is laborious and expensive, sequential procedures may be expected to open up new possibilities in carrying on investigations which do not seem feasible by the older methods. The application to item selection described here is only one of many possible uses for sequential designs. The applications to education and psychology promise to be rewarding but are as yet almost entirely unexplored.

Unfinished Business in Elementary Science*

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IT is evident that the totalitarian governments have lost no time in focusing education in their elementary schools on the furtherance of their political philosophies. The American people cannot afford to do less for their democracy. Among the unfinished business of elementary science is the need to make certain that the contributions of science to the development of democratic living are fully utilized in the education of children, beginning at the earliest level.

SCIENCE EDUCATION FOR ALL CHILDREN

There is power in the knowledge of science. In a democracy that power must be in the hands of all the people. It is imperative, then, that all our boys and girls have an education in science which will equip them to deal with such civic problems as food supply, wise utilization of national resources, smoke nuisance, and water pollution.

A design for elementary education that calls for the complete separation of children with ability in science from other children is a step toward a totalitarian form of government. We must at all hazards avoid letting a scientific and political group which has lost contact with the majority of the people gain control of our government. Science must be utilized for the development of unity among our own people and in the world as a whole.

Children with exceptional abilities in the field of science can be given opportunities for leadership and creative activities in the classroom and in the community without being separated from those who are less gifted. Still unfinished is the study of individual differences with provision in science education for all the children in the classroom around common settings. Many elementary teachers have made marked achievement in this direction.

EDUCATION FOR UNCERTAINTY

We are living in a period of paradoxical conditions. Everyone knows that through science man has made discoveries about the nature of the universe which can be useful in developing a higher standard of living, better health, more conveniences, finer recreation, yet many of these discoveries provide man with new means for human destruction. Modern man seems to be on the threshold of a new era. Will it be an era of progress toward a

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better civilization or a plunge backward into a new Dark Ages. The boys and girls in our classrooms live in a time of important decisions—decisions as to whether science is to be used predominantly for good or for evil. It is essential to the very survival of our civilization that the next generation be intelligent concerning the potentialities of science.

The education of American boys and girls to make intelligent decisions in a world of uncertainty and strain is also of unusual importance at this time. "Our strategic geographical location, our vast material and technological resources, along with the decline of certain historic centers of world power, have thrust our country into a position of primary world responsibility."[1] American boys and girls must be educated for this world responsibility.

The schools have been designed traditionally for an era of certainty, with fixed intellectual goals and an absolute and authoritarian view of subject matter. But we do not know what the future will be for the children in our classrooms. Furthermore, we are learning through science that what we know today may need revision tomorrow. Man's conception of truth changes. To educate our boys and girls for certainty when there is little or no certainty, we must move in our teaching from an absolute and authoritarian concept of truth to one of relativity. This demands widespread changes in our procedures of instruction. The function of the teacher in the classroom must be altered; he must become a learner with children as well as a teacher of children.

Science is a determining factor in our culture. Discoveries of scientific content have shaken the foundations of man's thinking. Existence of microorganisms, the immensity of the universe, the structure of the atom, the transmission of electrical energy, the internal gas engine have revolutionized man's thinking and customs in practically all phases of his activities. The large patterns of the universe, such as space, time, change, adaptation, interrelationships, variations, and resemblances must not be ignored in our elementary education. These patterns represent natural gestalts which provide for the continuous growth of children.

Boys and girls must learn to handle and to experiment intelligently with the forces and materials of the universe. Unintelligent tampering and carelessness with the forces and materials of the universe bring disease, ugliness, waste of natural resources, unemployment, poverty, war, and widespread unhappiness. Children must develop a poised, well-balanced, and yet realistic outlook upon the modern world. They must learn that by working resourcefully and intelligently with the materials, forces, and patterns of the universe they can create their own world. In a real sense, children can be provided with an optimistic as well as objective view of the future.

[1] John L. Childs, "A Student of Public Affairs Views the Problem of Curriculum Development." *Teachers College Record*, January 1949, pp. 232-40.

We must strive not only to assist children to become intelligent concerning the universe, but also to help them build ideas regarding the kind of world they desire. We must strive to give them a realization of the fact that man, through science, has the opportunity to build the kind of civilization he wants. A vision of the place of science in making a better world must become a part of education.

Science is basic to most if not all of the areas of social needs. Such areas as health, mental hygiene, sex education, safety, conservation, economics, fire prevention, emotional stability, and social cooperation draw heavily on the fields of science for content. Various meanings associated with such scientific ideas as balance, interrelationships, and variation can assist in the establishment of attitudes favorable to international understanding. Much remains to be done in the improvement of instruction so that science will contribute to the area of social needs.

Changed behavior in all areas of the child's life should result from something more than cautions and commands. This is especially true in areas of strategic social importance, such as conservation, safety, and health. The child who strews papers on the floor or is careless with matches is in a better position to make the desirable changes in behavior if he has the content related to the purposes for the change. The relationship of the content of science to the development of desirable social behavior is unquestionably an item of unfinished business in elementary science.

SCIENCE IN NURSERY SCHOOL AND KINDERGARTEN

Another item of unfinished business is the study of science at preschool and early childhood education levels. We need more knowledge about how to correct misconceptions, unscientific attitudes, and undesirable behavior and how to encourage resourceful and intelligent behavior. Almost all students of early childhood education (nursery school and kindergarten) agree on the importance of giving attention to the habits, attitudes, and ideas developed by young children. Boys and girls form undesirable and desirable habits even before they enter school. Behavior patterns and conceptions formed in early childhood may persist throughout life. Greater public support of early childhood education would pay enormous dividends to society.

Careful analysis of the early activities of children reveals experiences that involve very elementary but fundamental meanings and form the beginnings of the study of science. These meanings are largely sensory and nonverbal in character. They may include such experiences as roughness, smoothness, sharpness, lightness, heaviness, friction, gravity, momentum, inertia and many others. We need to give more recognition to the stage of learning about the environment which is experiential and sensory in character.

An item of unfinished business, then, is the strengthening of science instruction at the preschool, nursery school, kindergarten, and first-grade levels. Parents should understand the place of

science in the development of children. The school must assist parents to gain knowledge of how to direct children in making wholesome interpretations. The equipment of the nursery school and kindergarten should be selected for its value in interpretative play and manipulation.

SCIENCE FROM A DEVELOPMENTAL POINT OF VIEW

Science in childhood education should be considered completely from a developmental point of view that is sound with regard to the fundamental nature of both children and science. This basis seems to be the interpretation of the environment. Through science, man has attempted to interpret his universe. The child, too, attempts to orient himself to his environment. This indicates that the historic function of science—that of explanation and interpretation of the events of the environment—is in keeping with the dynamic drives of children. Teaching and learning in the field of science can be consistent, then, with the nature of the children.

From the point of view of science education children do not come to school for the first time at zero in science learning. They have already reacted to gravity, energy, lightning, thunder, darkness, light, weather, and a host of other scientific phenomena. They may bring with them misconceptions and superstitions, and become a liability to society. Or they may come to school with a good attitude for learning and ready for the development of resourceful behavior. The fact that the child lives in a universe which causes him to interact with it and that he is surrounded by others with interpretations which they force upon him, causes him to form interpretations, correct and incorrect, in the preschool years.

We must be concerned about the child's ideas of himself and of the world. It is in this direction that science plays a large part. Teaching content item by item without concern about what is happening to the child's own orientation to his world will not serve the goals of science education. Evaluation must become an integral part of instruction in science and should be in terms of the child's intelligent adjustment to the environment. Although excellent progress in this direction has been made by many classroom teachers in recent years, the integration of evaluation and instruction needs to be simplified and clarified for use in classrooms.

The contribution of the scientific method to the development of desirable behavior in children needs concentrated study. It has been assumed by many that the utilization of the scientific method in the elementary school by children will bring with it scientific attitudes and habits. Such thinking seems scarcely adequate to the requirements of elementary education. We must think back of the scientific method and ask ourselves what kind of children we want.

It must be recalled that children are discovering facts for themselves and not for society. It is impossible for them to secure by themselves all the

culture they will need for life. They must learn to turn to authentic sources. Furthermore, the method of problem-solving used by the scientists, with the various steps or elements in sequence, however fitting it may be in the research laboratory is not necessarily childlike and a natural gestalt for learning at all levels in the elementary school. The applications of critical thinking that are natural to children frequently are fragmentary and disconnected as seen by an observer, however integrated they may become within the child's own mental processes.

Examination of the spontaneous behavior of children as found in research studies yields illustrations of the following: questioning magic as an explanation of events; searching for an explanation of things which happen; realizing that some natural phenomena have not yet been explained satisfactorily by scientists; rejecting personification, mysticism, animism, anthropomorphism, prejudices, teleology or gossip in making explanations; realizing that interpretations acceptable today may be corrected and improved tomorrow; changing one's ideas as the result of new evidence; rejecting guessing and faulty thinking as a means of ascertaining truth; being willing to check conclusions; questioning the accuracy of sources of information; questioning the acceptance of the opinions of those who are not qualified in the field in which the opinions are given; questioning superstition and fortunetelling; placing confidence in the methods and conclusions of scientists; making distinctions between facts and fiction; seeking and acting upon reliable information.

It should be noted that these behavior patterns are consistent with growing democracy. Children who display these patterns are the kind needed in a democracy. Such children would be able to preserve and improve their way of life.

We must have a change of emphasis in science education. We should move from the rigid application of the elements of the scientific method in problem solving to procedures that are concerned with the development of desirable behavior. It is not behavior under the dictation of the teacher which is useful for evaluation. Children should be allowed to participate in such a way that teachers can observe spontaneous behavior and thus have a true means for evaluation of the children's progress.

We need to evaluate children on the basis of their growth in desirable behavior. As a result of education a child may progress from random and impulsive behavior to intelligent planning. Another child may grow from one who accepts everything he hears to one who states hypotheses and calls for proof and authentic sources. A third child may turn from dogmatic attitudes to consideration of new ideas. We need more knowledge of how children may develop from unintelligent to resourceful and desirable behavior.

Science in the elementary school in terms of child development must be science appropriate to children. It must be in the context of childhood

education and under the guidance of those who know children. Hence, elementary school teachers and supervisors should have responsibility for the instruction in science. It is because of their efforts that science has made its phenomenal growth in recent years.

Elementary science must not be high school science brought down to the elementary school level. Traditional equipment of high school physics, chemistry, and biology can provide no adequate basis for instruction in the elementary school. Very few high school teachers, however well qualified they may be in science at their own levels, are competent in elementary science.

THE IMPROVEMENT OF INSTRUCTION

Observation of instruction in schools reveals that the introduction of elementary science has tended to improve the general tone of the instruction in hundreds of classrooms. This has been true because the explanation of the events in the environment calls forth the natural drives of children. Boys and girls make proposals in the form of explanations and things to do. They draw conclusions. They look for new challenges and new interests. They are willing to participate in planning instruction. Still needed in elementary education is further modification of the procedures of the classroom in such a way as to crystallize the potentialities that reside in the natural drives of children.

In spite of the significant advance of science in childhood education, considerable improvement in methods of instruction is needed. Supervisors should encourage the passing of the rigid recitation method found in so many schools. The quality of discussions, experiments, and excursions should be greatly improved. Books and visual aids should be used intelligently rather than abused. Instruction should be planned in such a way that children can participate in the planning.

It is apparent to almost every administrator and supervisor that there is great need for professional education of teachers in science. Professional education must be conceived as continuous and universal in character. It should be democratic and cooperative in design. The general supervisor should not be eliminated. Instead, there is a movement toward a new kind of supervision, one in which supervisors work cooperatively and democratically with planning groups. This task is difficult because of the concept of supervision embedded in our culture. Parents should be brought into the planning groups for the professional education of teachers and should be encouraged to participate freely in the discussions. It is imperative that the support of the parents and the community be secured for elementary science.

Teachers within a school system should learn cooperatively how to study their communities. This is a vast frontier for study. Phenomena should not be studied as if isolated within four walls of the classroom. Instead, the child should become increasingly resourceful as a result of his discovering

that science can be utilized to make his community an improved place in which to live. Education in the elementary school needs to be designed in this direction.

SUMMARY

As long as we have a democracy we shall have unfinished business in elementary science. It shall be so because we must continuously consider children, science, and society. Each of these represents a practically inexhaustible frontier for study.

Science is such a recent enterprise on the part of mankind that society has not yet made the necessary adjustments to it. As a result, it is not known in what kind of world the children in the elementary school will live. We can be certain, however, that the future depends upon their resourcefulness with science, and hence to no small extent upon the character of childhood education. Teachers and supervisors need to rethink continuously the purposes of science in the elementary school in terms of the development of intelligent and resourceful behavior. Evaluation of behavior should become an integral part of instruction. Elementary science must be planned within the framework of childhood education to meet the need of improving society in a world of uncertainty. Science, with its contributions to democratic living, can be utilized in developing a generation capable of assuming leadership in a world torn by bitterness and prejudice.

Teachers College, Columbia University Register of Doctor of Education Reports

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97. ABBOTT, FORREST LEON
A purchasing manual for higher educational institutions with special reference to Teachers College. 1948.

98. AKAMATSU, ALFRED SABURO
The function and type of program of a Japanese minority church in New York City; a program for the establishment of the Japanese-American Church of Christ in New York. 1948.

99. ALLEN, WALTER POWELL
Selecting reading materials for Chinese students; a technique for selecting reading materials which provide cultural background for learning English at Huachung University. 1948.

100. ALTENA, JULIANA ELISABETH VON REGTEREN
A comparative study of education in the Netherlands and in the United States of America. 1947.

101. BAKKEGARD, BENJAMIN MARVIN
Utilizing community music resources to improve rural living. 1948.

102. BARANCO, HENRI ETTA ELYNOR
Personal development of high school girls through physical education activities. 1948.

103. BARNEY, MARIA INES
Planning for Colombian youth. 1948.

104. BATY, HARVEY FRANKLIN
A plan for education in religion at Montana State University. 1947.

105. BEACH, NORTON LEWIS
Public action for powerful schools. 1948.
Later published: Metropolitan School Study Council, Research Studies, No. 3. New York, Teachers College, 1949.

106. BEGG, WILLIAM ROY
Techniques toward the recognition and definition of human needs in the area of educational adaptability. 1947.

107. BERGER, DONALD WALTER
A study of cooperative learning in the eleventh grade core groups of the Horace Mann–Lincoln School. 1948.

108. BERGSTROM, ROBERT WILLIAM
A recommended undergraduate program of professional physical education for men students at Oregon State College. 1947.

109. BERKNESS, HAZELLE MARION
Proposals for the development and use of cumulative records in teacher education. 1948.

110. BIGELOW, MERRILL ALBERT

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111. BILLS, ROBERT EDGAR
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112. BISHOP, JOHN LYNN
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113. BLACKBURN, ARMOUR JENNINGS
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114. BOLLES, ROBERT STEPHEN
A compendium of solo flute literature for teachers and students of the flute. 1948.

115. BOYNTON, HOLMES
The development of number meanings in successive editions of recent third-grade arithmetic texts. 1948.

116. BRADY, MARNA VENABLE
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117. BRAEM, WILLIAM A. F.
Teacher morale, an investigation of the significance of morale factors as judged by 150 New Jersey school teachers. 1948.

118. BRICK, MARIA
Some clinically trained ministers and the programs of their churches. 1947.

119. BRITTON, ERNEST RAYMOND
Identifying and utilizing community activities for school improvement. 1947.

120. BROWN, LEROY
Public relations; a function of Alabama county and city superintendents of education. 1948.

121. BUCHER, LESTER SAMUEL
A program of in-service teacher education in music for elementary school teachers in Tennessee. 1948.

122. BUEBENDORF, FRANCIS XAVIER
A study and special treatment of classic symphonies for the school orchestras. 1947.

123. BULEY, HILTON CLIFFORD
Personal characteristics and staff patterns associated with the quality of education. 1947.

124. BURNS, CRANFORD HERMAN
A plan for improving guidance services in the state of Alabama. 1948.

125. BURNS, GERALD PHILIP
The educational implications inherent in the program of the American Camping Association. 1948.

126. BYROM, JACK ALVIN
A proposed professional program of physical education for the six state colleges of Oklahoma. 1947.

127. CARUTHERS, JAMES WADE
Pacific trade and American policies, 1784–1860: needed revisions in general and college textbook accounts. 1948.

128. CHAPLINE, ALLEN WHEELER
The NAM and its effort to influence education. 1948.

129. CHRISTESON, WAYNE
The development of musicianship in the high school rehearsal. 1947.

130. CHRISTIE, ROBERTA
A guide for camp counselors. 1948.

131. CHU, PING-CHIEN
A proposed administrative pattern of the hsien (county) school system in China. 1947.

132. COLOGNE, ROSE MARY
Coordinating resources for the development of a community program in family life education. 1947.

133. COOKE, PAUL PHILLIPS
Aims of English in vocational schools. 1947.

134. COULTER, KENNETH C.
A study of the feasibility of forming a Glen Rock high school. 1947.

135. COX, DONALD WILLIAM
Education and power groups in America; the struggle over federal aid for education. 1948.

136. CUNNINGHAM, JACOB HENRY
The development of a community plan of Protestant religious education in Packanack Lake, New Jersey. 1947.

137. CUTHBERT, KENNETH NEIL
The place and development of small ensemble playing in instrumental music. 1947.

138. DARLAND, DWIGHT DAVID
The relation of federal public land administration and public school administration in eleven western states, with special reference to Wyoming. 1947.

139. DAVIS, WILLIE LEE
The administration and organization of education in-service in Alabama with emphasis on four school systems. 1948.

140. DELABARRE, CECIL FRANZEN
The development of a course of study in economic zoology for students of agriculture at the Virginia Polytechnic Institute. 1948.

141. DENNISON, MARY CLYMER
Improving living and learning in the school program, 1944–1947. 1948.

142. DI CARLO, LOUIS MICHAEL
A program of auditory training for adults with impaired hearing. 1948.

143. DONNELLY, ALICE IRENE
The physical educator as a consultant in elementary schools. 1947.

144. DOTSON, FLOYD DAVID
Planning a program for a community school for Samson community. 1948.

145. DUNLAP, WILLIAM LUDWIG
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146. EASLEY, FRANCES JOSEPHINE
Cooperative evaluation in the elementary school. 1948.

147. ERICSON, DOROTHY LOUISE
The role of the woman physical education teacher in the administration of a secondary school. 1948.

148. FAN, CHUNG-TEH
Curriculum reorganization in rural China. 1948.

149. FARMER, FLOYD MERLE
The public high school principalship. 1947.

150. FINNEY, JAMES CORNELIUS
Integrating the field work experiences of adult education trainees at Tennessee State College through the utilization of community organizations. 1948.

151. FLAHARTY, WILLIAM HARRAR
Community patterns of educational understanding. 1947.

152. FOSSIECK, THEODORE HENRY
A plan for a proposed program of educational interpretation for Western Military Academy. 1948.

153. FOSTER, FLORENCE CHRISTINE
A proposed plan for the improvement of physical education at Mary Baldwin College. 1948.

154. FOSTER, WALTER NORMAN
Camping applied to physically handicapped individuals. 1948.

155. FRASER, THOMAS PETIGRU
Science teachers' objectives and attitudes toward using community resources; a study of fifteen Maryland Negro secondary schools. 1948.

156. FRIEDRICH, KURT
Toward work-education: an attack on current youth problems. 1948.

157. FRIESEN, JOHN K.
The role of the Ohio Farm Bureau Federation and its neighborhood councils in rural adult education. 1948.

158. FRY, ALVIN ABRAM
A document for use in presenting financial and related information concerning the Tenafly school system. 1947.

159. GARDNER, RANDOLPH SCOTT
Instruments for the enrichment of secondary school mathematics. 1947.

160. GARVIN, JOHN EUGENE
A proposed program of in-service education for the teachers of the Catholic schools of the diocese of Bismarck. 1948.

161. GASTWIRTH, PAUL
The relationship between theory and practice in the internal organization of the curriculum in the elementary school. 1948.

162. GEORGE, NORVIL LESTER
A plan for the centralized school service shops of Oklahoma City, Oklahoma. 1948.

163. GOLD, MILTON JACOB
Working to learn: operations as the core of secondary education. 1948.

164. GOLDIN, AUGUSTA REIDER
Reconstructing social behavior. 1947.

165. GORE, LACY LAWTON
The organization and administration of a coordinated program for the preparation of teachers of the arts at George Peabody College for Teachers, with special reference to the preparation of industrial arts teachers. 1948.

166. GOULD, LOIS MAY
Suggested state-wide standards for guidance services in the secondary schools of Pennsylvania. 1948.

167. GREGORY, CARL EMERSON
The organization and installation of a social foundations sequence in the College of Engineering at New York University. 1948.

168. GURSKEY, JOHN BERTRAM
Self-selection: a process for improving the quality of learning. 1948.

169. HAEGELE, ELENORA AMELIA
The improvement of group experience in public school kindergartens. 1948.

170. HAITHCOCK, MARY DARE
Pupil-teacher planning; a suggested plan for improving learning experiences in the elementary schools of the lower Merion district, Ardmore, Pennsylvania. 1946.

171. HAMILTON, ROSS EDWIN
An initial investigation of a technique of evaluating improvement in intelligibility of the speech of deaf children. 1948.

172. HANSEN, KENNETH JAMES
Business experience for prospective business teachers; the characteristics of an effective coordinated program of business experience for prospective business teachers. 1947.

173. HARTZFELD, FREEDA ODESSA
The college residence a laboratory for living. 1947.

174. HEDLUND, PAUL A.
Measuring public opinion on school issues. 1947.

175. HENDERSON, LEON NESBIT
Housing education for prospective teachers: a proposed plan for the College of Education, University of Florida. 1948.

176. HENRY, VIRGIL
The objective study of religion as a function of publication education. 1948.

177. HERROLD, KENNETH FREDERICK
Student personnel aspects of health

services for college students in eighteen institutions. 1948.

178. HEUGH, WILLIAM CHARLES
School board members: who shall they be and how shall they be selected for election, with particular reference to small cities and suburban communities. 1947

179. HIBBARD, MARY LOIS R.
Marriage, children and careers. 1947.

180. HICKS, SAMUEL IRVING
A plan for the organization and administration of an area vocational education program jointly conducted by the school districts of Rockland County, New York. 1947.

181. HIGHTOWER, ESTELLE
Selection of curriculum source materials appropriate for social studies in the secondary schools of Alabama. 1947.

182. HILL, JAMES WILSON
Secondary education in North Carolina. 1948.

183. HILL, WARREN GARDINER
A plan for securing better educational opportunities for secondary school youth in the state of Maine through lay participation in educational planning. 1948.

184. HJELMERVIK, KENNETH SANDO
Organizing and developing general music classes in selected high schools of Washington and Oregon. 1947.

185. HOCKIN, KATHARINE BOEHNER
A method and plan of work for developing a program in religious education for Christian secondary schools for girls in Szechuan, China. 1948.

186. HODGES, GLADYS COUTH
Violin manual for the non-violinist music teacher. 1948.

187. HOGGARD, LARA GULDMAR
Teaching music in the choral rehearsal. 1947.

188. HOLLEY, JAMES ANDREW
A plan for a cooperative study of talented youth resources. 1947.

189. HOLMAN, MARY V.
How it feels to be a teacher. 1948.

190. HOPPE, ARTHUR A.
Student participation in curriculum improvement. 1947.

191. HORNING, RALPH VINCENT
Aids for the advanced student and teacher of the brass wind instruments. 1948.

192. HORNOWSKI, EDWARD BRONISLAW
A coordinated plan for music education in institutions offering both liberal arts and teacher education curricula. 1948.

193. HOUGEN, LEIF ARNOLD
Plan for a continuing financial survey of the school district of the city of Royal Oak, Michigan. 1947.

194. HOWERY, HELEN GRAY
Instructional materials on five British Romanticist poets: an index to a collection and a demonstration of some techniques of editing and using the materials in the preparation of teachers of English. 1948.

195. HUFFMAN, HARRY
The use of common experiences in the approach to elementary bookkeeping. 1947.

196. HUNT, VALERIE VIRGINIA
The rehabilitation movement: as a social force. 1948.

197. HUTCHINSON, JOHN LAMBERT
Interdivisional program of leisure education for prospective recreation leaders and for all teachers, at Teachers College, Columbia University. 1948.

198. JACKSON, KARA ENID VAUGHN
A plan for the advanced professional education of Jeanes teachers through direct community participation as an

integral part of the Grambling-Tuskegee graduate study plan. 1948.

199. JENKINS, ROBERT EDWARD
Youth assumes community responsibility; a challenge to school administration. 1947.

200. JOHNSON, BURT POWERS
Handbook for county board of education members and district committeemen of North Carolina. 1947.

201. JORDALEN, MARION INGEBORG
Desirable music experiences for the prospective elementary teacher. 1947.

202. JÖRGENSON, ELIN KATRINA
Music to play and sing; prepared for keyboard study in general music classes for the training of elementary teachers. 1948.

203. KADHIM, ABDUL HAMID
A plan for the reconstruction of teacher education in Iraq. 1947.

204. KELLEY, JANET AGNES
College life and the mores. 1947.
Later published: New York, Teachers College, 1949.

205. KEMBLE, ELIZABETH L.
Attitudes toward their nursing school experiences of students in five collegiate schools of nursing. 1948.

206. KESSEL, JOSEPH BERTRAM
A guide for the organization and administration of youth centers. 1948.

207. KIDD, JAMES ROBBINS
A study to formulate a plan for the work of the Canadian Citizenship Council. 1947.

208. KOCHMAN, PHILIP
The developing role of teacher unions. 1947.

209. KRONEMEYER, ROBERT FERD
Adolescent sexual education and guidance in a democracy: an analysis of the problem and a proposed program. 1948.

210. KWOH, EDWIN SIH-UNG
Chinese students in American universities. 1947.

211. LAMMERS, THERESA JANE
Some suggestions for the improvement of science education in the elementary schools of Massachusetts. 1948.

212. LANCOUR, ADLORE HAROLD
A plan for the remodeling of the Cooper Union Library. 1948.

213. LANGE, NORMAN EDGAR
A plan for a coordinated vocational and educational guidance program for the public secondary schools of Columbia County, New York. 1947.

214. LATHROP, JOHN CLARKE
Promotion of international understanding through the exchange of high school students; a project of the Metropolitan School Study Council providing exchange visits between American, Latin American, and Scandinavian students. 1948.

215. LEAVITT, NORMA MURIEL
The administration of intramural activities in the physical education program for college women. 1948.

216. LEE, PAO-CH'EN
A proposed plan for the education of music teachers at Peip'ing National Teachers College. 1948.

217. LLOYD, JOHN WILLIAM
Work experiences in teacher education; a survey of administrative practices, problems, and judgments of values in various types of work experiences for students in teachers colleges. 1947.

218. LORIMER, WESLEY CRAWFORD
The improvement of teacher education in the normal schools of Saskatchewan. 1948.

219. LOVINGER, WARREN CONRAD
General education in teachers colleges; a study of programs of general edu-

cation in four-year curricula for elementary school teachers—American Association of Teachers Colleges, 1947. 1947.

220. Lowry, Everett Ellsworth
Projected plan for the establishment of an experimental community art center for Cortland, New York. 1948.

221. McCormick, Clifton Francis
An administrative code for the Springfield, Missouri, public schools. 1947.

222. McDougall, William Dewar
Suggestions for the improvement of elementary teacher education in the province of Alberta. 1947.

223. McDowell, Ernest Gordon
An approach to the reorientation of the rural secondary school program in Tasmania. 1948.

224. McNiff, Alice Elizabeth
Education: a study of man. 1948.

225. Magan, Isabel Louise
What our schools are trying to do. 1947.

226. Mahood, David Edgar
Supplementary readings in the social foundations of education. 1948.

227. Martin, William Norman
A pattern of youth leadership and professional integration in American education; the Berks County project. 1947.

228. Masley, Alexander Simeon
Beginning modern design. 1948.

229. Mellado, Ramón Antonio
Culture and education in Puerto Rico. 1947.

230. Michaels, Joseph
Proposed student selection policies and procedures for the institutes of applied arts and sciences. 1948.

231. Miller, Herbert E.
Scholarships for Alberta. 1947.

232. Mohair, Mary Elizabeth Sullivan
A program of human relations education for Hasbrouck Heights, New Jersey, high school. 1948.

233. Mooney, Gertrude Xavier
Mexican folk dances for American schools. 1948.

234. Morgan, Kenneth Brown
A plan for an interscholastic mathematics contest in Westchester County. 1947.

235. Morrison, Allan Bruce
A proposal for reorganizing intermediate administrative districts in the province of Nova Scotia. 1948.

236. Orme, Rhoda
Counseling in residence halls. 1948.

237. Parody, Ovid Frank
The process of initiating and developing a new curriculum at the Drum Hill Junior High School, Peekskill, New York. 1948.

238. Parsons, Seth Hamilton
Audio-visual aids to the improvement of reading. 1948.

239. Patterson, Laurence Prescott
A plan for the reorganization of the administrative structure of Protestant education in greater Montreal. 1947.

240. Pearson, Gaynor
The decisions of Committee A; a study of the administration–faculty disputes reported by the Committee on Academic Freedom and Tenure of the American Association of University Professors. 1948.

241. Pearson, Ophelia Wilhelmina
The people help themselves to better living through the use of certain available resources. 1948.

242. Pelley, James Harvey
Invention in education. 1948.

243. Penn, Albert John
Current practices in the evaluation and

selection of textbooks in the elementary school, with a consideration of some conditions related to such practices. 1948.

244. PERRY, LAWRENCE RICHARD
An extension of diatonic tonality. 1947.

245. PETERS, ANN CEAL
A survey of the development of evaluation in arithmetical learnings. 1948.

246. PITTMAN, JOSEPH AVERY
A study of the methods, the findings and the interpretations in studies of Negro intelligence. 1948.

247. PLAYER, WILLA BEATRICE
Improving college education for women at Bennett College. 1948.

248. RADLOW, SYDNEY S.
Contrasting conceptions of the social function of the public schools in the period between the two world wars. 1948.

249. RAUBINGER, FREDERICK MELTON
Certain aspects of departmentalization in high schools. 1947.

250. REDMOND, JAMES FRANCIS
Administrative factors affecting teacher strikes. 1947.

251. RESCIGNO, ROCCO EUGENE
The high school problem in Yonkers, New York; new high schools for old. 1948.

252. ROBERTS, JACK DARLING
Interpreting through the medium of the motion picture what schools can do. 1948.

253. ROSE, ELIZABETH LAMAR
A needs-approach to the teaching of English. 1947.

254. ROTHSTEIN, JEROME HAROLD
The status and need for teacher education in special education in New York State. 1948.

255. SÁEZ, FLORENCIO
Democratizing organization and administration in the Evangelical Seminary of Puerto Rico. 1947.

256. SALLESE, NICHOLAS FRANCIS
Lessons in Spanish literature and civilization. 1948.

257. SATTERLEE, O. WARD
Administrative policies and procedures related to admissions in the elementary school. 1948.

258. SAXE, CARL HERMAN
A comparison of personality description obtained from the thematic apperception test and from therapeutic contacts. 1947.

259. SAYRE, EDWIN DONALD
Building choral tone; a basic approach to the development of choral singing, with phonograph recordings as supplementary aids. 1948.

260. SEIDLE, CHARLES A.
Some implications for higher education in proposals for universal military training. 1948.

261. SHEPARD, GEORGE EDWARD
A study of state organizations conducting programs of interscholastic athletics, with particular implications for North Carolina. 1948.

262. SHIPLEY, CHARLES MORTON
Proposals for developing the curriculum for a two-year programme in Nova Scotia's provincial normal college. 1948.

263. SHIPLEY, CLIFFORD BYRON
A handbook for business education in the small high school. 1947.

264. SIERKS, EDWARD FREDERICK
Considerations in preparing or selecting health pamphlets. 1948.

265. SKOGSBERG, ALFRED HAINES
Administering operational patterns. 1948.

266. SMAY, DAVID PAUL
A proposed program of evaluation of the professional art education of art teachers-in-preparation at the State College for Teachers at Buffalo, N. Y. 1948.

267. SPREEN, HILDEGARD LUISE
Modern dance as a creative art form. 1948.

268. STOKES, CHARLES WARBROOK
Initiating the improvement of instruction with special reference to science in the Mount Vernon secondary schools. 1948.

269. STOLLBERG, ROBERT J.
Suggestions for teaching electronics. 1947.

270. STREVELL, WALLACE HOWES
State aid for central school building. 1948.
Later published: New York, Teachers College, 1949.

271. STULTZ, RICHARD EUGENE
An educational experience program for Explorers Camp with suggestions for improving camps for older youth. 1947.

272. TANSIL, BLANCHE ALLEN
Feeding children at school; for administrators. 1946.

273. TAYLOR, ELIJAH EDWARD
Principles and policies governing the use of public school property in the several states, with special reference to New York State. 1947.

274. THOMPSON, PAULINE EVELYN
Teacher–community interaction; in Bedford–Stuyvesant area, Brooklyn. 1947.

275. TIPTON, GLADYS GUENNE
A basic music record library for elementary schools. 1947.

276. TURNER, ETHEL MARIE
Consumer mathematics in adult education. 1948.

277. ULLAH, SALAMAT
A scheme for the reorganization of the examination system of elementary and secondary schools in India. 1948.

278. VAN NESS, PAUL HEWETT
A faculty study of discipline problems. 1947.

279. VEON, DOROTHY HELENE
An orientation handbook for prospective administrative personnel in the federal service. 1947.

280. VON CHARLTON, RUDOLPH EVERETT
A revision of the music curriculum at Prairie View College, Prairie View, Texas. 1948.

281. WALKER, ARCHIE GLENWOOD
A study of certain personnel policies affecting clerical employees in city school systems. 1947.

282. WALLACE, MORRIS SHEPPARD
The induction of new teachers. 1948.

283. WALTER, DON ALAN
The core of experiences as the basis for the organization and operation of the Horace Mann–Lincoln high schools. 1947.

284. WALTER, RAYMOND LEE
A cooperative program for student teaching involving a private college and a city school system. 1947.

285. WEAVER, EDWARD KIMMONS
Meeting the needs of Negro science teachers in Alabama. 1947.

286. WERNER, GEORGE IRVING
Interscholastic athletics in grades seven, eight, and nine. 1948.

287. WESTERMAN, WILFRED ALAN
A plan for the reorganization of secondary education in New South Wales. 1947.

288. WHEEN, GEORGE ALFRED
The training of Christian youth leaders in New South Wales, Australia. 1948.

289. WHITE, PAUL CLARENCE
The business cycle and the Protestant church, including a financial analysis of 419 local Lutheran churches. 1948.

290. WICKWARE, ROBERT KENNETH
Developing science education with regard for the regional community of eastern Connecticut. 1947.

291. WILLIAMS, ESTHER
Talks to teachers of language arts. 1947.

292. WILLIS, DAVID ELLSWORTH
Suggested policies to improve the quality of beginning teachers in Kansas high schools through integration of recruitment, selection, and induction. 1948.

293. WILSON, DOROTHY
A guide for a continuing staff education program for the professional nursing staff of the Visiting Nurse Service of New York. 1948.

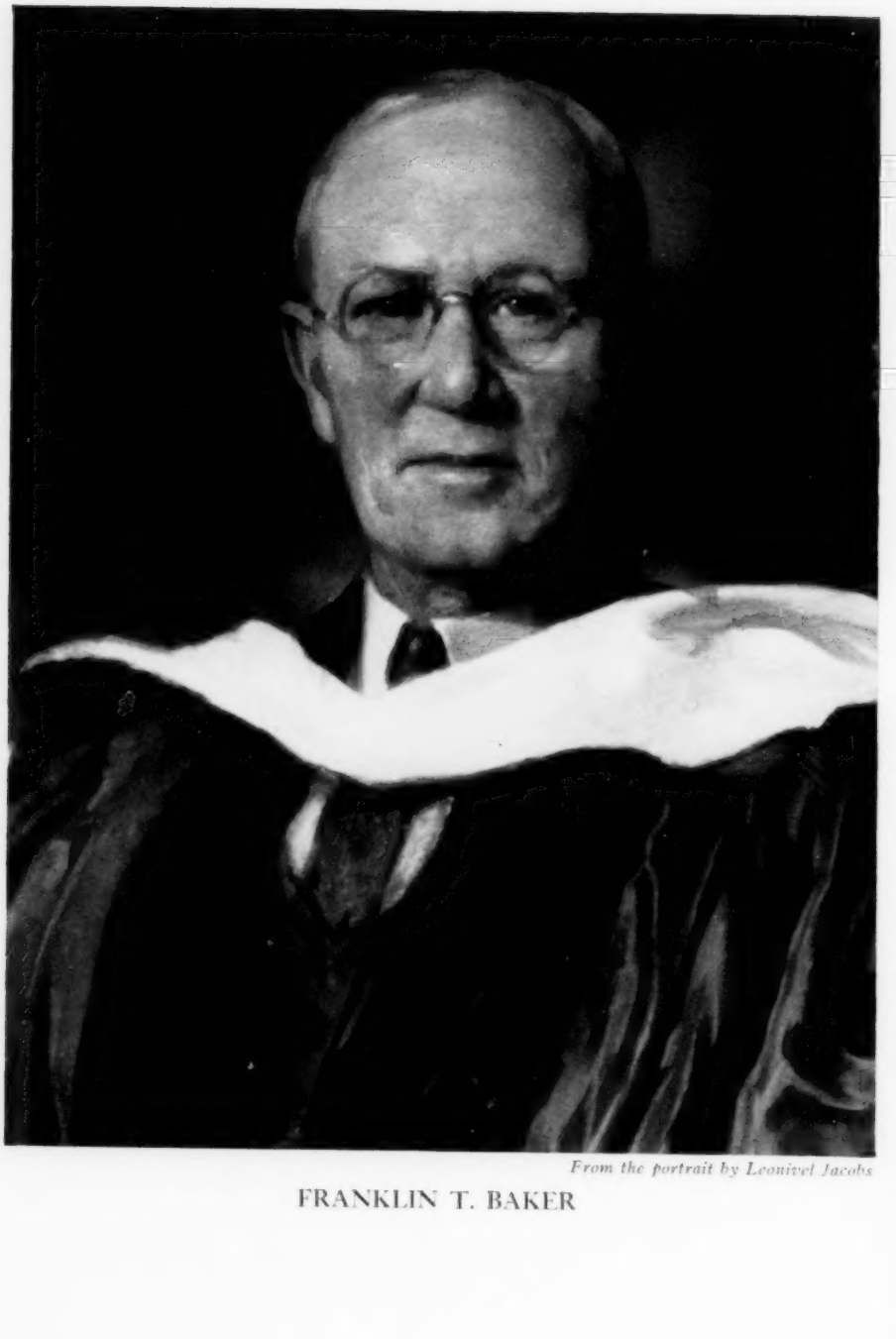
294. WISE, WILLIAM MAX
Developing a guidance program through social process in Great Neck High School. 1948.

295. WITT, PAUL WILLIAM FRED
In-service education of teachers in the use of audio-visual materials of instruction. 1947.

296. WOODWARD, HENRY BASCOM
The effect of fiscal control on current school expenditures. 1948.

297. YASIN, MOHAMMED HUSSAIN
Education for all Iraqi youth; reorganization of secondary education in Iraq. 1947.

298. YOUNG, NANCY SHEEKY
A plan for the improvement of reading in the junior high schools of New York City. 1948.



From the portrait by Leonivel Jacobs

FRANKLIN T. BAKER

Franklin T. Baker, 1864-1949

FRANK BAKER, who died on February 3 at his home on Park Hill, Yonkers, taught in Teachers College for forty-one years, from 1892 to his retirement in 1933; indeed for several years beyond that date he continued to give his popular course in nineteenth century literature. He saw the College grow from a small independent school to its union with Columbia University and its development into a great institution of international importance. Throughout these years, no professor has been more beloved than he, or has had wider influence. Important as his scholarship and his professional leadership were, it is as a human being and a friend that he will be most warmly remembered.

For Frank Baker was first of all a great humanist, in his learning, in his theory of education, in the classroom application of it which he practiced and taught.

His reading was both wide and deep, from the Greek and Latin classics of his early schooling through the richness of our literary inheritance to the best contemporary writers. It was wholly in keeping that Robert Frost once said to him, "Why can't you stop over sometime and spend a week end with me? I'd like to have you!" He read widely and remembered a vast amount, but selectively, cherishing those writers who nourish and fortify the human spirit. Like Wordsworth's "Happy Warrior," he was one

> Whose high endeavors are an inward light
> That makes the path before him always bright;
> Who with a natural instinct to discern
> What knowledge can perform, is diligent to learn.

His constant habit in reading, and one which he taught his students, was to fix in memory some scene, some bit of dialog or of characterization, some significant descriptive line, that would symbolize the whole book and would recall it all to memory. And the parts he most cherished were those humane passages that illuminate life, even in its darker corners, with the light of the human spirit. This he constantly stressed, rather than the technical aspects of art form or of historical influence and development. He cared little for books that the wisdom of the ages has willingly let die, but much for those of early or present times that reflect the things about which people of that age really cared, and that thus make us one with all humanity. He took great pleasure in the really apt word; the very last time I saw him, five days before his death, he said "Allan, do you know the Greek word for *cat?* I've just learned it:

αἴλουρος, tail-waver; isn't that good?" He liked the bits of old German folkways embedded in the speech of the so-called "Pennsylvania Dutch" in his part of Maryland; he liked equally the taciturnity of the Vermont country carpenter to whom he had five years before sent a very good pocketknife, who when Frank stopped by for a chat, after half an hour drew out his knife and whittled silently for a while, then remarked "This is a good knife I've got here," and after another prolonged silence, "A friend gave it to me."

The same quality characterized his educational ideals. Throughout his long career, he was looked up to the country over as a leader. He gave the first course in the teaching of English offered in any university. In the early years of this century he was a member of the College Entrance Examination Board, and exercised a constant liberalizing influence on the English examinations set. He was joint author, with Fred Newton Scott and George Rice Carpenter, of the first comprehensive book on the teaching of English, still a sound and helpful guide to teachers. He was the second president of the National Council of Teachers of English, and the center of that little group who used to sit in the hotel lobby while the Council's programs were going on and make the really important decisions. He was always in demand as a speaker to English teachers; he wrote countless articles for the professional magazines, prepared two series of school readers, edited a number of classics—*Treasure Island*, Browning's *Shorter Poems*, Franklin's *Autobiography*, and others—compiled a very comprehensive critical bibliography of children's literature, contributed to the Columbia volume celebrating the Shakespeare tercentenary an article on the teaching of Shakespeare—but his name was never attached to any technical method or device. He was suspicious of devices, and of new names for ways of teaching, of standardization, of statistics; I think he had faith in all the things that evade statistics and refuse to be standardized. Yet he was open-minded about the new techniques; in the days of composition scales of unhappy memory, he declined to give time to them himself, but got his assistant to give his students a little experience with them. His technique of supervision he briefly summed up once to me: "Allan, I'm no kind of a supervisor; my only principle is, pick the right people, and don't bother them."

His own courses were dominated by the spirit of the clerk of Oxford,

> Gladly would he learn, and gladly teach.

One of his former students recalls his saying, "A teacher should be like a hostess to her class," and advising the teacher to have on her desk a few tempting books. He would constantly tempt students into attractive bypaths. Once when a student began a sentence "I don't think" he interrupted, "How many of you remember what the Mad Hatter said to Alice when she began that way?" Only one hand went up. "The Mad Hatter said, 'If you don't know, you shouldn't speak.' And only one of you knows *Alice in Wonder-*

land? You're not educated, until you know your *Alice*." Or in teaching the *Odyssey* he would bring into class the volume of Perrot and Chipiez that treats of Mycenaean excavations and show those beautiful color prints of the embossed gold bowl such as Alcinous gave Odysseus, or the bronze daggers inlaid with golden leopards that young Telemachus might have thrust in his belt when he went to make his maiden political speech in the assembly of the princes. And so students got a brief but inviting look into archaeology.

Constantly he sought to make students forget that they were numbered names on a registrar's list; to get in some way near their personalities, as a cordial host—and who could be so gracious a host as he? He once said to his assistant, "Look up the third person in the fourth row; she smiles in just the right places." He was fond of picking out a young beginner from some small distant town, who felt submerged in the great university, and keeping up a running fire of banter directed at her till she broke into smiles whenever he glanced that way; or doing just the same thing with an older and perhaps tired and discouraged teacher, taking the load of twenty or thirty years off her back. The one thing he couldn't stand was self-importance; the man who sought to promote himself by monopolizing the time of the class soon felt Frank's skill in puncturing balloons. He read examination books in the same spirit, trying to get at the real inner quality of the student. The mere recital, on examination, of textbook information or opinion rated at best not more than C; his A's were for the student who showed, if only in a single sentence, an awakened intelligence, a quickened personal insight.

Just as he made his students feel at home in the classroom, he made them welcome in the society of the major authors, in the realm of ideas and of imagination. The lines of poetry quoted in this article are chosen because they were constantly on his lips, not as organized instruction, but casually, as he might cite an anecdote of Brander Matthews or Mark Twain.

But there was more. The helpful and sympathetic office conference; the needed word of personal encouragement; the cheering vase of tulips from his garden brought into the examination room; fighting the battles of the deserving student with college formalities or with the city Board of Examiners; getting the needed financial aid to tide one over a crisis; calming the angry, reassuring the worried, making crooked paths straight. We think of him with respect for his scholarship, with gratitude for his professional accomplishment and his teaching skill, but with a special warmth of affection for

> That best portion of a good man's life,
> His little nameless unremembered acts
> Of kindness and of love.

ALLAN ABBOTT
Emeritus Professor of English

Doctor of Education Project Reports

WILLA B. PLAYER. Improving College Education for Women at Bennett College.*

This project reports on a curricular program dealing with the problems of collegiate education for women.

The procedure followed was: (1) to analyze the findings of a Graduate and an Undergraduate Inquiry concerned with the problems of daily living in relation to the needs of women; (2) to describe and interpret recent efforts at curricular improvement; and (3) to suggest steps for furthering the development of the educational program now in operation.

The setting where the curricular program has been in progress was described. Bennett College, in Greensboro, North Carolina, is a four-year liberal arts college for women. In the report, reference was made to the objectives of Bennett College, its facilities for learning, and the characteristics of the students. Phases of the institutional life discussed as reflecting the current situation emphasize: the importance of (1) the individual student; (2) meeting the needs of students; (3) religion as an aspect of daily living; (4) the principle that purposeful education should function in action; (5) a democratic atmosphere on the campus; and (6) contributing to the life of the community.

CONCLUSIONS

A discussion of the five major guides used by the Bennett College faculty in the program of curriculum development follows:

1. The concept of need is looked upon as a condition or a variety of conditions operating in the experience of the individual which, if inadequately provided for, will produce unsatisfactory outcomes.

2. An adequate curriculum should provide for the major needs of students as persons, as citizens, and as workers. This principle implies that the problems of students have their parallels in non-academic life. A curriculum based on needs involves, on the one hand, the student and her needs, and, on the other hand, the teacher and his understanding of the purposes of the curriculum as a whole.

3. A women's college should seek to define and solve the problems of women as distinguished from those of men. This principle does not deny that in many respects the needs of men and women are similar.

4. Effective curriculum development requires the active cooperation of all those involved in it or affected by it.

5. The organization and procedures for a program of curricular development should be provided for in terms of the needs and conditions of the situation as the program advances.

FINDINGS

The findings of the Inquiry revealed the need for more instruction in nine areas of human experience: earning a living, communication, mental and physical health, consumer education, community leadership and citizenship, home and family life, recreation, religion and philosophy of life, and problems of the Negro. Efforts were directed toward expanding curricular offerings, enlarging areas of specialization, planning a program in general education,

*The manuscripts of the Doctor of Education Project Reports reviewed in THE RECORD are on file in the Library of Teachers College, Columbia University.

developing field study, providing more effective guidance, and enlarging the facilities for learning in four of these areas: earning a living, mental and physical health, home and family life, and community leadership and citizenship. Outstanding among the curricular offerings provided were courses in social science, health, general literature, and modern marriage. Field study was developed in four rural communities. College major fields included sociology, clothing, and music.

The revised curriculum seeks to meet the needs of the students in significant areas of human relationship. A central problem of the administration and the faculty, with respect to the efforts already made, is to give impetus to the entire educational program wherever possible. Future efforts may be developed from a concerted and continuous attack on the questions which arise daily as the students of Bennett College participate in the life of the campus.

WESLEY CRAWFORD LORIMER. The Improvement of Teacher Education in the Normal Schools of Saskatchewan.

The project was designed to develop recommendations for the improvement of the program of teacher education in the normal schools of Saskatchewan and to serve as a basis for discussion and planning by the faculties of those institutions together with the Director of Teacher Education for the Province.

PROCEDURE

A brief history of teacher education in Saskatchewan introduced the study. Chapter II was devoted to an analysis of data obtained from an opinion poll of normal school graduates teaching in the Province. This poll listed 64 problems likely to be met in day-to-day teaching. Respondents were asked to indicate, with reference to each problem: whether it was troublesome; how much help they received from their pre-service education; whether in-service help was desired; and how important the problem was. In addition, nine items dealt with specific procedures which were part of the normal school program and nine others with possible additions to or alterations of the program.

A survey of the literature relating to pre-service programs of teacher education was made. The opinions of graduates and experts were then synthesized, and recommendations developed that seemed feasible and practical in Saskatchewan.

CONCLUSIONS

The following general recommendations were made: that an advisory committee be established to assist the Director of Teacher Training; that attention be given to the problem of adequate staffing and financing; that the period of pre-service education be extended beyond one year; and that the program be re-evaluated at intervals by means of a survey of the opinions of graduates.

In the area of the curriculum it was suggested: that a program of study be established that would include courses in general education and advanced subject matter; that two major professional sequences be established, one dealing with the child and the curriculum and the other with foundations of education; that the program include both prescribed and elective courses; and that experimental work be undertaken in the area of evaluation. The program as outlined envisages a maximum of teacher-student planning. It also suggests that less time be spent in formal classes, more in activities that would encourage all aspects of growth.

The following suggestions were made in the area of student teaching: that a laboratory school be established for each normal school; that cooperating schools be carefully selected; that faculty members have numerous contacts with the cooperating schools; that the work in student teaching be differentiated to meet the needs of individuals; that cooperating teachers be specially qualified; and that a director of

student teaching be appointed at each institution.

In the area of student personnel services it was suggested: that the present program of selection be fully implemented; that the normal schools provide adequate health services; that there be systematic and adequate counseling; that the extracurricular program be broad and adequate; that there be a sound program of placement and follow-up; that there be an adequate system of records; and that the personnel program be administered by a competent staff.

It was recommended that the normal schools provide leadership in school-community relations, and that student teachers be encouraged to participate in community affairs.

Since the normal schools have been and should be actively associated with in-service education in the Province, it was recommended: that the present program of institutes be extended; and that summer courses be carefully integrated with the total program of teacher education.

The study concluded by suggesting the possibility of providing one teachers college, to be operated jointly by the University of Saskatchewan and the Department of Education, which would educate all teachers for the Province.

FLOYD D. DOTSON. Planning a Program for a Community School for Samson Community

The problem of this study was to plan, for the community of Samson, Alabama, a community school program that will help the school to serve better the needs of the community, including the needs and interests of the boys and girls; and to provide for the maximum development of youth, both as individuals and as members of a democratic society. This means an interrelationship of school and community that can be achieved only through careful study of both the resources and the needs of the community.

This program must do more toward meeting the needs of boys and girls than the programs of the past several years have done. One test of an effective school program is its ability to hold the students in school until they finish. According to that test the program has been weak, because approximately 50 per cent of the students who enter high school at Samson leave before receiving a high school diploma. This means that the school is not accepting its responsibility for developing all the youth of the community. Its holding power must be improved by improving the curriculum, revising its system of marking and promoting, and more nearly meeting the needs, interests, and abilities of the boys and girls by having more practical courses involving work experience.

PROCEDURE

First, the writer examined much of the available literature written by various educational authorities on the subject of community schools. This included books, magazine articles, newspaper clippings, bulletins, reports of studies made by other schools and organizations, and class lectures and conferences.

Five different community schools were studied at firsthand for two or three days. Some of the things looked for on these visits were: administrative devices, organization of the program, the curriculum, the attitude of the community toward the school, the interaction of the school and the community, the school's program of adult education and community recreation, how its program of work experience fits into the needs of the community, and the ability of its students to accept responsibility.

Several key teachers, including the recreation director, vocational agriculture and home economics teachers, were hired by the writer on a twelve-months basis and given the responsibility for working out programs for both students and adults in their particular areas.

Just before school opened last fall a one-week workshop was held in which needs and problems of school and community were studied. Committees were selected to

make recommendations later in the year.

The writer's Senior Democracy Class made surveys of the problems and needs of the town of Samson and of Geneva County.

CONCLUSIONS

A community school requires the active cooperation of everyone concerned—teachers, pupils, parents, and lay members of the community, both organized and unorganized. The principal cannot build the school by himself; neither can the teachers.

The school program must be centered around the interests and needs of the community, and must utilize and coordinate all community resources, both material and human. There must be interaction between school and community.

The community school must include a program of adult education and community recreation.

The community school must provide for a better program of school–community relations that includes the use of the "best and wisest" of the community in planning the school program.

A more functional curriculum must be developed, including a greater variety of practical courses involving actual work experience.

The school must be willing to accept its responsibility both to the community and to the boys and girls, in helping them to grow in civic, economic, and social efficiency so that our young citizens will be well-balanced individuals capable of taking their places in a democratic society.

WILLIAM A. F. BRAEM. Teacher Morale: An Investigation of the Significance of Morale Factors as Judged by 150 New Jersey School Teachers

This study seeks to present a survey of the opinion reflected in the literature of the recent past regarding morale; to obtain from discussions and through free response from teachers in service a list of factors which appear to influence morale; to produce a list of practices and procedures, operative in schools in Northern New Jersey, which teachers in service judge highly significant; to explore the possibilities of morale evaluation; and to point out areas for further study.

Morale literature of the past several decades was surveyed, and seventy teachers were asked to designate procedures and practices they considered significant in conditioning morale. All opinions were compiled and regrouped according to administrative, board, community, and intra-staff relationships.

A questionnnaire was devised and submitted to 150 teachers enrolled as graduate students in New Jersey State Teachers College at Montclair. The questionnnaire was a reaction inventory of eighty-four principles and practices grouped under the categories mentioned above. Included also were questions regarding the length of teaching experience and the level of morale in the schools where the teachers were employed, and six questions found by Dr. Ruth Cunningham of Teachers College, Columbia University, to be a psychological approach to the estimation of job-satisfaction. Teachers gave two responses to each item: the first, to indicate the significance of the procedure; the second, to indicate whether it was satisfactory, unsatisfactory but not disturbing, or disturbing.

All of the factors presented for judgment ranked high—from 61.3 per cent on the lowest to 92 per cent on the highest. Freedom to teach without being hampered by prescribed methods was considered the most significant factor.

The most disturbing factors were: politically controlled school boards; inadequate school housing; insufficient cooperation of parents; insufficient board consultation with citizens and teachers; inequitable extracurricular loads; inadequate salaries; insufficient time for conferences, individual work, and relaxation; insufficient awareness, on the part of school boards, of the morale effect of their actions; administrative favoritism toward certain teachers; and the lack of long-range salary planning.

Some implications of the experiment are

worthy of consideration. One concerns the relationship between consistency in policy and the teacher-morale level: teachers are apparently more concerned with sound salary procedures, stability, and long-range planning than with immediate increases or bonuses which may be suddenly swept away.

Teachers showed great indecision and hesitation regarding job-satisfaction. The profession is apparently not wholeheartedly recommended to young people by teachers in service.

The findings indicate that teachers are disturbed by the lack of close cooperation with parents. On the other hand, teachers apparently need to be encouraged to take a more active part in community life; the fact that they ranked this item very low implies a disadvantageous detachment from community activities.

The low ranking of guidance in the questionnaire responses shows a strong need for educating teachers to the possibilities of this field. Either guidance services are not available in many schools, or teachers are ignorant of, or have unfavorable attitudes toward, this phase of education.

Probably the most striking evidence uncovered is an indication of the strong effect of administrative practices and board policies on faculty morale. Forty-three of the fifty top-ranking items were concerned with these matters.

GEORGE IRVING WERNER. Interscholastic Athletics in Grades Seven, Eight, and Nine

This project deals with interschool athletic competition in grades seven, eight, and nine. It examines current programs of interschool athletics, and surveys the opinion of physical education authorities on the values of this program. A set of principles is formulated as a guide to the conduct of interschool athletics at this level. Finally, the project discusses practical aspects of the program.

PROCEDURE

The status of interschool athletics in grades seven, eight, and nine was surveyed by means of: (1) interviews and correspondence with teachers, supervisors, and directors who conduct interschool athletics in elementary and junior high schools; (2) examination of written material used in carrying on interschool athletics programs; and (3) review of literature on the subject of physical education and interschool athletics in these grades.

On the basis of this research, the project discusses the place of interschool athletics in grades seven, eight, and nine.

CONCLUSIONS

The project reaffirms the right of physical education to an integral place in the school curriculum.

Physical education in the United States is now committed largely to a games and sports program. Athletics play a key role in physical education.

Interschool athletics should be regarded as a part of the physical education program in grades seven, eight, and nine, and should serve as a culmination of the class instruction and the intramural program.

Properly conducted interschool athletics make the following important contributions to education: they provide an enriched program for the physically gifted child, stimulate both class instruction and the intramural program, provide an outlet for the inherent adventure drive of children, broaden the child's social horizon, strengthen school morale, and further the development of the competitive spirit which characterizes the American way of life.

The principles enumerated in the project should govern the conduct of the interschool athletics program in grades seven, eight, and nine.

Departmental Notes

Office of the Dean

THE Hotel Commodore, New York, was the scene of a dinner on February 14 attended by Teachers College alumni, faculty, staff, and friends. Dean William F. Russell and Associate Dean Hollis L. Caswell were speakers, with Columbia University Provost Albert C. Jacobs delivering special greetings.

Dean Russell also spoke at the January meeting of the New York Schoolmasters Club on "Problems of Education for Peace."

Division I

Foundations of Education

SOCIAL AND PHILOSOPHICAL FOUNDATIONS

ACCORDING to Professor Goodwin Watson, the role of the private social agency in the next 50 years will have to undergo radical changes to keep pace with changes in our civilization. Professor Watson expressed this conviction at a luncheon January 7 celebrating the 50th anniversary of the Hebrew Educational Society, Brooklyn, which was attended by two hundred heads of social agencies.

As co-chairman of the program committee, Professor R. Freeman Butts helped with plans for sessions of the History of Education Section, National Society of College Teachers of Education, meeting in St. Louis February 27 and 28. Needed research in the history of education and methods of focussing this history upon current problems were considered by the Section.

ON Friday, January 21, Professor Robert King Hall left for Persia, where he will be a contractual consultant for Overseas Consultants, Inc., until May. Professor Hall has been given a service leave by Teachers College to write the educational section of a seven-year plan for the economic development of Persia. He will go from Persia directly to South America, where he will give a lecture series on education at the University of Brazil in Rio for two months.

THE late Professor Emeritus Paul Monroe was honored on December 29 when Dr. H. V. Wellington Koo, Chinese Ambassador to the United States, unveiled a plaque in his memory at a ceremony in New York. Professor Monroe was co-founder of the China Institute.

PSYCHOLOGICAL FOUNDATIONS AND EDUCATIONAL RESEARCH

THE Hunter College Elementary School Parent's Association heard Professor Irving Lorge speak December 14 on "Follow Up of the High I. Q." Two weeks later, Professor Lorge attended the meeting of the American Statistical Association at Cleveland's Hotel Statler. He discussed "The Use of Statistical Procedures in the Derivation of Family Budgets" on one of the programs.

Division II

Administration and Guidance

EDUCATIONAL ADMINISTRATION

A Review of Fiscal Policy for Public Education in New York State, a survey directed

by Professor Paul R. Mort, has been published by the New York State Educational Conference Board.

Speaking and other professional engagements of Professor Mort recently have included an address to the administrative officers of Baltimore schools December 14; a school finance conference in Chicago January 15 to 17, sponsored by the NEA Committee on Tax Education and School Finance; a meeting of the Educational Policies Commission of the NEA March 11 to 13, and a speech before the Pennsylvania School Study Council March 23.

THIRTY Texas school superintendents, as well as graduate students and faculty members of the University of Texas, met Professor Willard S. Elsbree in November when he visited Austin to discuss problems of teacher salary schedules at the University's College of Education.

PROFESSOR Edward S. Evenden joined the Committee on Problems and Plans of the American Association of Colleges for Teacher Education at its initial meetings in Washington December 28 and 29. Policies and problems emerging from this preliminary meeting were presented at the annual convention of AACTE in St. Louis during February.

EARLY in December, Dr. Arthur Linden addressed the Fort Worth, Tex., Classroom Teachers Association on "What Is a Decent Educational Program?" Interviewed at the time by several Forth Worth papers, Dr. Linden stated that he is in favor of junior colleges geared to vocational training as a solution to the problem of the teenager who is not mature enough to undertake university work.

GUIDANCE

THE Jewish Vocational Service of Cleveland has presented Teachers College with a fellowship providing for an internship with the Cleveland group and a cash allowance of $750 for five months annually. The recipient is to be a post-Master's student. The fellowship is probably the first grant furnishing supervised internship in vocational guidance for a person of this background.

MAJOR changes for the better in evaluating children's work via report cards were considered by Professor Ruth Strang in an article for a recent issue of *National Parent-Teacher*, publication of the National Congress of Parents and Teachers.

Division III

Instruction

CURRICULUM AND TEACHING

AT the annual conference for supervisors for the State of Florida, held in Gainesville January 17 to 19, Professor Ralph R. Fields was a consultant on problems of the junior college area, and delivered a speech on "Evidences of a Good Junior College Program."

A leave of absence for the spring semester has been granted Professor L. Thomas Hopkins, who will serve as a visiting expert on curriculum problems to the Office of Military Government in Germany until June.

DURING January and February, Professors Roma Gans, Alice Miel, Willard S. Elsbree, and John R. Clark served as lecturers in the workshop, "Trends in Elementary Education," at Springfield College, Springfield, Mass.

At a luncheon December 7 attended by three hundred members and guests of Ivriah, women's division of the Jewish Education Committee, Professor Gans was a speaker.

THE parents of younger children in Brooklyn's Berkeley Institute heard Professor Emma D. Sheehy on "Exploring the Child"

January 12. Professor Sheehy addressed the American Association of University Women, Easton, Pa., February 15.

THE opening speech at the Iowa Conference on Family Life at Des Moines January 19 was given by Professor Ernest G. Osborne.

Professor Osborne was recently named one of five regional consultants by the National Congress of Parents and Teachers to plan programs with State Congresses of Parents and Teachers in the Northeast.

A special conference on "Using the Community to Improve Education" was held at the College prior to the ASCD convention in February. Under the chairmanship of Professor Paul Witt, the conference studied the contribution of community resources in improving the curriculum, and how such resources may be located and effectively employed. Professor Osborne delivered the opening address and Professor Gordon N. Mackenzie was the speaker at the concluding session. In between, there were eleven work groups whose time was devoted to visiting potential sources of curriculum enrichment in and around New York. Trips included such diversified spots as a radio station, an airport, a housing development, a medical center and a department store. Faculty members who cooperated in planning and successfully carrying out the conference included: Professors Hamden L. Forkner, Lillian Locke, Martin Chworowsky, Edwin Ziegfeld, and Paul Kozelka as well as Mr. Robert Edgar, Miss Marguerite E. Kakosh, Mr. Walter Stone, Mr. Burnett Cross, and Mr. C. Louis Forsdale.

SOCIAL SCIENCE

THE *American Magazine* for January includes an article, "Border Battles Among the States," by Professor George T. Renner, who is also co-author of a new book entitled *World Political Geography*. Written by a symposium of 33 American geographers, the volume is published by Thomas Y. Crowell Company. Professor Renner contributed two introductory chapters on the theory of political geography, introductions to the seven parts of the book, and two chapters on the geopolitics of Africa.

DOCTORAL candidate William C. Steele is the author of an article in the January *Journal of Geography*.

NATURAL SCIENCES

A team of eight staff members of Japanese universities and schools has translated Professor Gerald S. Craig's *Science for the Elementary School Teacher*, which will appear in a Japanese edition shortly.

Professor Craig spoke at the Gloucester County Teachers Institute, Woodbury, N. J., on December 9.

ENGLISH AND FOREIGN LANGUAGES

PROFESSORS Lennox Grey, Aileen Kitchin, and Professor Emeritus Ida A. Jewett attended the November meetings in Chicago of the National Council of Teachers of English. Professor Grey was chairman of a section dealing particularly with community college work; Professor Jewett presided at a session on undergraduate preparation of high school and college English teachers, and Professor Kitchin read a paper by Instructor Forsdale on "Audio-Visual Methods in the Communication Skills."

WHILE in Cleveland November 29, Professor Grey addressed a meeting of the Cuyahoga Council of Teachers of English, and conferred with Fenn College officials and officers of the Ohio associations of teachers of English.

At the meeting of the New York State Association of Junior Colleges on January 15 at Sampson College, Professor Grey gave a preview of the forthcoming bulletin, *Wanted: 30,000 Instructors for Community*

Colleges, which both he and Professor Karl Bigelow have helped to prepare for the Council on Cooperation in Teacher Education.

PROFESSOR Daniel Girard was a member of the reception committee selected from the New York Metropolitan Chapter, Modern Language Association of America, during the Association's annual meeting in the City late in December. On February 24 and March 14, Professor Girard served as consultant to the foreign language department of Plainfield, N. J., High School.

MUSIC EDUCATION

PROFESSOR Ernest E. Harris spoke to the American String Teachers Association convening in Chicago December 29. As Eastern Province Governor, he also attended the national meeting of Phi Mu Alpha Sinfonia fraternity held concurrently in Chicago.

ON March 10, Professor Norval L. Church was guest conductor at Hampton Institute, Hampton, Va.

THE Sinfonia meetings were also attended by Professor Harry R. Wilson, chairman of the editorial committee which revised the Sinfonia song book.

On January 5, Professor Wilson was guest conductor and lecturer for music classes and choruses at the University of Missouri, Columbia. On January 15, he repeated this role for the state clinic of the Minnesota Music Teachers Association held at the University of Minnesota, Minneapolis.

BUSINESS AND VOCATIONAL EDUCATION

TYPEWRITING teaching methods were the subject of a demonstration by Professor John L. Rowe before students of Paterson State Teachers College, Paterson, N. J., January 19.

Division IV
Nursing Education

ASSOCIATE Dean Caswell and Professors Fields, R. Louise McManus, John K. Norton, and Miss Mary C. Connor, research associate, attended a three-day workshop on the improvement of nursing and nursing education in January at Battle Creek, Mich. Leaders in the field were called to Battle Creek from all over the country to discuss improvements recommended by the recently completed study, *Nursing for the Future*. Dean Caswell and Professors McManus and Norton were consultants; Professor Fields was chairman of the conference, and Miss Connor was chairman of the Committee for the Improvement of Nursing Education created by joint action of the six national nursing organizations. Reports from the conference indicate the possibility of a realistic, well-conceived program of action designed to cope with the many problems facing the nursing education field.

NEW director of nursing and associate professor of nursing education at the University of Kansas School of Medicine, Kansas City, is Jean M. Hill, instructor of orthopedic nursing in the Division until February 1.

Institute of Administrative Research

THE Committee of Fourteen of the Metropolitan School Study Council has released its report through the Teachers College Bureau of Publications. Entitled *Public Action for Powerful Schools*, it was prepared under the chairmanship of Raymond Collins (Ed.D. 1945), superintendent of schools at Manhasset, N. Y. Dr. Norton Beach, research associate in the Institute, was executive secretary of the committee. This is the third in a series of research studies undertaken by the Metropolitan School Study Council.

Office of Field Relations and Placement*

The following recent appointments are reported by the Office of Field Relations and Placement:

Adams, Vernette (A.M. 1947), teacher of first grade, Sherman Demonstration School, Oakland, Calif.

Anderson, Doris M. (A.M. 1941), assistant professor of home economics, Beaver College, Jenkintown, Pa.

Bogdanoff, Ruth F., teacher of children's group, Rockland State Hospital, Orangeburg, N. Y.

Buck, Madeline (A.M. 1947), teacher of instrumental music, Washington-Lee High School, Arlington, Va.

Burns, Gilbert (A.M. 1942), chairman of music department, Olympic Junior College, Bremerton, Wash.

Edgar, John W. (A.M. 1948), supervisor of music, Schwab High School, Weatherly, Pa.

English, Mildred E. (Ed.D. 1940), chairman, division of teacher education, Georgia State College for Women, Milledgeville, Ga.

Everett, Samuel (Ph.D. 1935), assistant professor of education, City College of the City of New York, New York, N. Y.

Fulton, Harriet (A.M. 1943), assistant professor of music, University of Tennessee Junior College, Martin, Tenn.

Gaither, Dorothy N. (A.M. 1948), kindergarten teacher, Public School, Needles, Calif.

Gallanter, Justin, teacher of English, Sewanhaka High School, Floral Park, N. Y.

Jacobsen, Einar W. (Ph.D. 1932), superintendent of schools, Public Schools, Santa Barbara, Calif.

Korner, Ija N., assistant professor of clinical psychology, State College of Washington, Pullman, Wash.

Mac Donough, Margaret E. (A.M. 1947), teacher of piano, Gulf Park College, Gulport, Miss.

Martin, Kenneth F. (A.M. 1948), bursar and assistant to the president, Upper Iowa University, Fayette, Iowa.

Morgan, Muriel (A.M. 1948), counselor, Jane Addams Elementary School, Long Beach, Calif.

Nelson, Benjamin O. (A.M. 1940), instructor in accounting, University of Bridgeport, Bridgeport, Conn.

Peterson, Sarah Childs (A.M. 1941), instructor in English, Hampton Institute, Hampton, Va.

Sparks, Raymond E. (A.M. 1934), assistant professor of physical education, Springfield College, Springfield, Mass.

Strayer, George D., Jr. (Ph.D. 1934), professor of education, University of Washington, Seattle, Wash.

Teager, Olga, senior chemical technician, Sloan Kettering Institute, New York, N. Y.

Twiford, Robert M. (A.M. 1948), coordinator of extra-curricular activities, South Side High School, Rockville Center, N. Y.

Warnecke, Warren T. (A.M. 1948), teacher of science, Adelphi Academy, Brooklyn, N. Y.

West, Esther Irene (A.M. 1927), assistant director, School of Nursing, Hartford Hospital, Hartford, Conn.

Westervelt, Robert M. (A.M. 1947), player of French horn, Houston Symphony Orchestra, Houston, Tex.

*Any student who is taking or has taken twelve points of work at Teachers College may register with the Office of Field Relations and Placement. Any student in the allied schools of Columbia University who has carried twelve points of work is also eligible for registration.

Alumni Activities

THIS January, ALFRED E. REJALL (A.M. 1907) of 54 Tompkins Place, Brooklyn, renewed his subscription to the RECORD for the fortieth consecutive time. Whether this is *the* record for a continuous subscriber is uncertain, but since the magazine is 50 years old, it must be close. Can any other subscriber top this?

ELLWOOD HSIN-PAO YANG (Ed.D. 1945) is now head of the educational section, Division of Rural Welfare, United Nations Food and Agriculture Organization.

FORMERLY state supervisor of home economics in Connecticut, and chairman of the division of home economics, George Peabody College for Teachers, Nashville, Tenn., NELLIE S. BUCKEY (A.M. 1932) has been named supervisor of home economics education in Baltimore.

FREDERICK W. HILL (Ed.D. 1942) became assistant school superintendent in charge of business administration in Yonkers, N. Y., the first of the year. Dr. Hill has been secretary of the board of education and business manager of the Abingdon, Pa., public schools since 1942.

HONORABLE mention in the 1948 travel contest of *The Instructor* Magazine was awarded to 21 entrants, including MARY E. ALBRECHT (A.M. 1946), teacher of grades two and three in the John McCormick School No. 30, Indianapolis. The title of Miss Albrecht's essay was "Switzerland for Christmas," describing a recent trip.

ROBERT H. MORRISON (Ph.D. 1934) of Trenton has completed a three-year term on the planning committee of the Chief State School Officers. He participated in a recent project to plan and submit to the State Commissioners of Education a statement of policies in state educational administration.

NURSE-in-charge of professional services of the Queens County Cancer Committee, American Cancer Society, is HELEN M. COLEMAN, former graduate student. Effective January 1, Miss Coleman's appointment follows a career as superintendent of nurses and principal of two schools of nursing in New York State.

PHYSICAL director in The Tarrytown School, Tarrytown, N. Y., for three years, MAURICE PALERMO (A.M. 1941) has been promoted to the principalship.

MARIE WALTERS (A.M. 1938), home demonstration agent in Belmont County, Ohio, has been named to the home economics specialist staff of the Agricultural Extension Service, Ohio State University.

AT this year's convention of the National Council of Teachers of English, MARK NEVILLE (Ed.D. 1941), head of the English department, John Burroughs School, St. Louis, was elected first vice-president.